

THE LINGUISTICS
OF SITTING, STANDING,
AND LYING

Edited by

JOHN NEWMAN

The Linguistics of Sitting, Standing, and Lying

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Volume 51

The Linguistics of Sitting, Standing, and Lying
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Preface

The chapters in this volume were written in response to a call for papers in August 1999, inviting linguists to explore linguistic properties of verbs which are used to describe some key at-rest positions: sitting, standing, and lying. Such verbs are referred to as “posture verbs” in this volume, even though these verbs may have various uses in addition to being used to refer to human postures.

The volume was envisaged as being a continuation, in some ways, of the approach adopted in an earlier volume *The Linguistics of Giving* (Newman 1997). That volume contained a collection of papers exploring the concept of giving (and, to some extent, taking) and its expression in languages. The approach there was to identify an event familiar from our experience of ordinary experiential reality and proceed from there to an investigation of a range of linguistic phenomena associated with the verbs which denote that event. This included phenomena relating to the encoding of the giving event in different languages (the lexicalization of the ‘give’ concept and the varied morphosyntax which can accompany such verbs), as well as phenomena relating to figurative usage and grammaticalization involving ‘give’ verbs. The present volume attempts to do the same for the posture verbs. The first chapter of the volume, by **John Newman**, provides an overview of the range of linguistic phenomena associated with posture verbs across languages. It introduces the main ideas which are fleshed out in greater detail in particular languages in the remainder of the volume.

Posture verbs, even in their most literal uses as verbs describing human postures, are worthy of close attention and the chapters on Lao and Japanese/English address issues relating to literal uses of the verbs, especially relating to the distinction between the action of entering into a posture and the state resulting from that action. This distinction is discussed by **N. J. Enfield** in a chapter on the Lao posture verbs which, interestingly, may be used in either an intransitive construction or a transitive-like construction. The latter would appear to be restricted to combinations of posture verbs with direct object nouns directly affected by the posture and/or nouns which refer to the kinds of entities which are typically associated with the posture. So, for example, the transitive use of the ‘lie, sleep’ verb is found with direct object nominals such as ‘straw mat’, ‘ground’, and ‘bed’, but not with ‘tree’ or ‘roof’. **John Newman** and **Toshiko Yamaguchi** compare the aspectual devices available in Japanese and English for distinguishing the action and state meanings associated with the sitting posture. Japanese

aspectual marking with *-te iru* creates an unambiguously stative interpretation of ‘be sitting’, even though with some other verbs *-te iru* allows either a processual or stative interpretation. In English, the present participle *-ing* form is associated with a number of semantic effects. However, in actual usage *sitting* is more commonly used with a stative interpretation than a processual one. The authors relate the Japanese and English facts to the experiential realities of the act and state of sitting.

The posture states, while all aptly described as “at rest”, have quite different roles to play in our lives. Sitting is generally associated with comfort and is a posture we can maintain for some hours while continuing to work with our hands, while continuing to talk etc. Standing in one position is not so comfortable and we are not inclined to stay in that position for so long, though it is a position with advantages for seeing at a distance, exerting force against others etc. Lying is the position associated, par excellence, with sleep, sickness, death etc. So, despite a commonality between the at-rest positions, there are also clear differences in their functions in our daily lives. The posture verbs encoding these states reflect these realities: with regard to some linguistic phenomena in a language (e.g. the basic syntax they occur with) they may appear a unified set, behaving in a parallel way, while in other ways (e.g. figurative extension of the posture meaning) the verbs may pattern differently. Sally Rice considers the posture verbs in Dene Sų́líné (Chipe-wyan), an indigenous language of Canada, from this point of view. Rice considers the behavior of each posture verb with respect to ten distinct lexical and grammatical properties. She finds that the ‘stand’ and ‘lie’ predicates behave in quite opposite ways while the ‘sit’ predicate is situated between ‘stand’ and ‘lie’, sharing some properties with the former and some with the latter. Rice sees her Dene Sų́líné data as lending support to the idea of a continuum ‘stand’ > ‘sit’ > ‘lie’, a continuum which is experientially based. Michael Noonan and Karen Grunow-Hårsta investigate the range of lexical and morphosyntactic differentiation found in posture verbs in Chantyal and Magar, two Tibeto-Burman languages of Nepal. They consider the lexical items which convey the posture meanings and find that both languages lack a simplex verb for ‘lie’, whereas simplex verbs can occur for ‘sit’ and ‘stand’. They argue that lying is the least agentive of the three postures, and this correlates with the lack of a simplex verb meaning ‘lie’. Other semantic and morphosyntactic details of posture verbs in the two languages can differ, however. For example, Chantyal makes distinctions between active involvement versus non-active involvement (on the part of the subject) and assuming versus maintaining the posture. Neither of these distinctions is made in Magar.

The remaining chapters deal mainly with the use of these verbs in contexts where they are not simply referring to humans in certain bodily positions. Languages, in varying degrees, allow or require posture verbs to refer to the location and orientation of inanimates, what one might call a “locational” extension. The

verbs can be used quite extensively as locational or existential verbs or participles, in which case they function, in effect, like classifiers. Another major direction of extension of the posture verbs is their evolution into verbal auxiliaries with a tense or aspectual meaning, most commonly a progressive or habitual aspectual meaning.

Maarten Lemmens reviews the use of Dutch posture verbs as locational and existential predicates, a use which is significantly more widespread than in English. He finds that the extensions of ‘stand’ and ‘lie’ verbs to locational/existential uses in Dutch are largely motivated by images of verticality and horizontality, i.e., images relating to “orientation”. The non-postural uses of Dutch ‘sit’, however, are best described in terms of “containment” and “contact”. Lemmens makes use of a substantial corpus of Dutch to substantiate his analyses.

As in Dutch, so also in the Brazilian language Trumai (a genetic isolate), the posture verbs have been extended to non-postural uses. The Trumai posture verbs are discussed by **Raquel Guirardello-Damian**. She includes in her discussion a verb meaning ‘be in water/liquid medium’ and another verb meaning ‘be in a closed place’ since these verbs have similar formal and semantic properties to the ‘sit’, ‘stand’, and ‘lie’ verbs. These verbs occur as main verbs as well as auxiliaries referring to the posture of the entity that is the S or A argument of the clause. Guirardello-Damian pays close attention to the conditions of use of these verbs in locational/existential uses, systematically distinguishing the conditions on the figure, the ground, and the spatial orientation associated with each verb.

The chapter by **Alan Rumsey** deals with the posture verbs and the role they play as classificatory verbs in some Papuan languages, in particular Enga and Ku Waru. In these languages, ‘sit’, ‘stand’, and ‘lie’ verbs function as existential predicates, each one occurring with a particular range of subject nouns. Rumsey discusses the classificatory bases for the different classes of nouns which occur with the posture-based existential predicates. Some of the classifications are more transparent than others. In Enga, for example, “habitat” would appear to be the principal parameter distinguishing the animate noun classes occurring with three of the posture-based existential verbs: heavenly animates occur with ‘stand’, subterranean with ‘lie inside’, and aquatic with ‘lie’. A less transparent classification is found with Ku Waru ‘stand’ which, as an existential verb, occurs with ‘hand/arm’, ‘leg/foot’, ‘eye’, ‘ear’, ‘forehead’, among others. Rumsey describes their commonality as involving body-parts which are “openly visible in face-to-face interaction with others”. The use of ‘sit’ as a default existential verb in reference to women and ‘stand’ as the corresponding verb in reference to men, as suggested by the title of the chapter “Men stand, women sit” is an additional, intriguing distinction in a number of Papuan languages.

Two chapters deal with posture verbs in Australian languages. **Cliff Goddard** and **Jean Harkins**, in their chapter, describe the range of uses (including auxiliary

uses) of posture verbs in two Pama-Nyungan languages of Central Australia: Arrernte and the Western Desert language Pitjantjatjara/Yankunytjatjara (two closely related dialects of the same language). In both these languages, the posture verbs are used as locational and existential verbs (the most general one being 'sit' in Arrernte and 'stand' in Pitjantjatjara/Yankunytjatjara), as well as having copula and auxiliary uses. They document the similarities and differences between the posture verbs within each language and between languages. Some Arrernte facts they mention reflect the special status of 'sit', 'stand', and 'lie' vis-a-vis other postural verbs: the three verbs *ane-* 'sit', *tne-* 'stand', and *inte-* 'lie', and only these three verbs, can occur with an intensifying suffix *-rtne*, and it is only these three verbs which can occur in a particular set of syntactic constructions. Similar observations can be made for Pitjantjatjara/Yankunytjatjara. Such facts lend support to the notion that precisely these positions are the key "at rest" positions, as reflected in the title of this volume. Nicholas Reid describes the behavior of posture verbs in Ngan'gityemerri, a non-Pama-Nyungan language of the Daly River region in Northern Australia. 'Sit', 'stand', and 'lie' are three of just six verbs that can function as simple intransitive verbs in Ngan'gityemerri, the other three being 'perch', 'go', and 'travel'. The posture verbs have a range of uses, including locational and existential, copula, co-verb, and serialised uses. In Ngan'gityemerri, the six simple intransitive verbs, including the posture verbs, can function as imperfective aspectual markers, cliticized to a verbal complex (a phenomenon which appears to have arisen only since the 1930s). In this capacity, the (incipient) aspectual use of the intransitive verbs appears to the right of the root + tense complex, an unusual ordering of tense and aspect with respect to the root (cf. Foley and Van Valin 1984:212). Reid speculates that the order of morphemes might switch to root + aspect + tense, in conformity to the cross-linguistic tendency, if the aspectual use of these verbs were to become more established. Ngan'gityemerri, then, is especially interesting in the way it offers us a view of an incipient grammaticalization of posture verbs.

Frantisek Lichtenberk reviews the linguistic facts pertaining to the posture verbs in Oceanic, a subgroup of Austronesian. Apart from carefully documenting the details of usage of the posture verbs in many languages, Lichtenberk reflects on some hypotheses about these verbs and the kinds of evolutions they might undergo. He finds evidence to support a kind of mini-hierarchy of STAND/SIT — LIE, in terms of how these verbs are used to refer to temporal extension, as happens in Oceanic. 'Lie' verbs will refer to the longest duration, or extendedness, when used to refer to temporal extension, while 'stand' and 'sit' verbs refer to periods of shorter temporal extension (languages vary as to which of 'stand' and 'sit' refers to a longer period of time). Lichtenberk also finds reason to support a grammaticalization path of POSTURE > LOCATIVE/EXISTENTIAL USE > ASPECTUAL use, an idea also advanced by Kuteva (1999).

Christa Kilian-Hatz, in her chapter on Kxoe, a Khoisan language of Namibia, argues for a particular path of evolution of posture verbs, drawing upon data from the contemporary language to illustrate the various evolutionary stages. She argues for a progression from main verb > copula (auxiliary) > aspectual auxiliary > aspectual suffix. This progression mimics an historically earlier development of postures into tense markers in the language. Here, too, the differences between the posture verbs are interesting, e.g., the ‘stand’ verb develops into a present tense marker, as well as a recent past tense marker meaning ‘a short time ago’; the ‘stand up’ verb appears to have developed into a past suffix meaning ‘today morning’; and the ‘sit down on a tree (of birds)’ verb has developed into the past tense suffix meaning ‘yesterday’. John Keegan discusses posture verbs in another African language, Mbay (a Central-Sudanic language of the Nilo-Saharan family, spoken mainly in Chad and neighboring parts of the Central African Republic). The posture verbs *ndi* ‘sit’, *dâ* ‘stand’, and *tò* ‘lie’ are unusual in so far as they have a phonological shape characteristic of grammatical morphemes rather than lexical verbs, consistent with the usage of these words as semi-grammatical morphemes. Keegan documents the use of these morphemes as main verbs, locational/existential verbs, progressive auxiliaries, deictic adverbs, and demonstratives. Keegan also includes a discussion of the dynamic ‘put’, ‘take’, and ‘fall’ verbs and compares the ways in which the posture verbs subclassify subject referents and the ways in which these dynamic verbs subclassify their object referents. There are interesting differences between the posture verbs and these dynamic verbs. For example, while there is a distinction made between things which can ‘sit’ (mortars, cups, basins, pots, baskets) and things which can ‘stand’ (poles, walls, trees), there is no comparable division between things which can be ‘stood’ and things which can be ‘set’, with the one verb ‘put’ covering the positioning of mortars, cups, basins, pots, baskets, poles, walls, trees etc.

Jae Jung Song considers four posture verbs and their range of uses in Korean. The verbs are *se-* ‘sit’, *anc-* ‘stand’, and two ‘lie’ verbs: *nwup-* plain ‘lie’ and *cappaci-* vulgar ‘lie’. Song demonstrates a difference in the ways in which these verbs extend to describing the position of inanimates. It appears to be only the ‘stand’ verb which can be extended in this way. When it comes to extension to progressive aspect marking, however, a different pattern emerges: it is only ‘sit’ and the vulgar ‘lie’ that can be extended in this way. Song’s analysis would seem to cast doubt on the universality of the POSTURE > LOCATIVE/EXISTENTIAL USE > ASPECTUAL path of evolution as proposed by Kuteva (1999) and for which Lichtenberk in his chapter finds support. In Korean, the posture verb that does not extend to general locative/existential use is the one that extends to aspectual marking.

A final chapter by Raymond W. Gibbs, Jr. reports on an experimental study from cognitive psychology investigating the cognitive basis of the figurative uses of *stand*. The research is significant as an attempt to establish an experimental

methodology enabling a researcher to study the relevant cognitive parameters in the figurative extension of English *stand*. The chapter is an update on the research first reported in Gibbs *et al.* (1994). Although Gibbs' research is concerned only with the *stand* verb in English, his methodology is applicable to the other posture verbs and to posture verbs in any language.

Some explanations concerning the conventions adopted in this book are in order. Posture words in single quotes ('sit', 'stand', 'lie') are used to refer to posture expressions with these meanings, or approximately these meanings, cross-linguistically; the italicized posture words refer to particular forms of posture expressions in a language, e.g., English *sit*, *stand*, and *lie*. Posture words are normally glossed with their posture meanings ('sit', 'stand', 'lie' etc.) in this volume, even though the forms are sometimes used in other ways, e.g., grammaticalized uses. Different languages lend themselves to different representational formats. So, for example, languages with established romanized orthographies lend themselves to the usual orthographic conventions (capital letter at the beginning of a sentence, a full-stop at the end of a sentence etc.), whereas languages without established romanized orthographies lend themselves more to a phonemic representation without punctuation marks. These different preferences have been respected in the preparation of this volume, with the result that the formatting of example sentences does vary somewhat across chapters.

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CHAPTER 1

A cross-linguistic overview of the posture verbs ‘sit’, ‘stand’, and ‘lie’

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1. Introduction

The concepts which are the focus of this chapter are the stative meanings ‘to be in a sitting position’, ‘to be in a standing position’, and ‘to be in a lying position’. I will refer to these meanings in an abbreviated way as ‘sit’, ‘stand’, and ‘lie’. In this chapter I offer an overview of the properties of verbs with these meanings, or ones which approximate them, based on data drawn from many different languages. The properties I will be concerned with cover both the central meanings of these verbs, i.e., the postural senses, as well as figurative or grammaticalized extensions of these verbs. The three postures play a significant role in the course of our ordinary daily routines and the verbs which denote these postures are common sources for further semantic extension.

2. Central meanings

Taking English *sit*, *stand*, and *lie* as a convenient starting point for our discussion, we may proceed to identify more closely the components of the meanings of these verbs and the experiential realities which underlie them. I will consider the following properties which together make up the larger semantic frame: the spatio-temporal domain, the force dynamics domain, the active zone associated with each predicate, and the socio-cultural domain.

The spatio-temporal domain refers to the overall spatial configuration which presents itself and is maintained through time. With all three of these postures there is a strong sense of the extension of a state through time and a strong contrast between the spatial configurations involved: a compact shape associated with sitting; an upright, vertical elongation with standing; a horizontal elongation in the case of lying. These three distinct spatio-temporal configurations constitute strong spatial images in human conceptualization and often play a

part in motivating alternative categorizations of entities, as discussed below.

The force dynamics domain refers to the manner in which entities exercise force or are subjected to forces. All three states may be maintained with no physical movement on the part of the person involved. Nevertheless, there are clear differences between these states in terms of the sensorimotor control which is needed in order to maintain the position. In the case of standing, both upper torso and lower torso need to be sturdy and held vertical; with sitting it is the upper torso which needs to be held vertical while the lower torso can be quite relaxed, or even paralyzed; and with lying no part of the body needs to be exercising any muscular or sensorimotor control at all. In terms of degree of control needed, then, there is a gradation from standing (requiring most control), through sitting, to lying (requiring least control). Notice that this gradation in degree of control required corresponds, in reverse order, to stages by which children develop, namely lying, then sitting, then standing. And of the three, the standing position, without any additional support, is the one which humans are least able to maintain for long periods of time. The control which needs to be exercised is not just a matter of force being exerted upon any particular object, rather it is a combination of control over one's own body and the exercise of balance in a vertical position.

Langacker (1987:271–4) has proposed the term *active zone* for the salient subpart of the overall meaning which is most directly involved in the interaction of entities or maintenance of a state. For example, eyelids constitute the active

Table 1. Central meanings of English *sit*, *stand*, and *lie*

Spatio-temporal domain	<i>sit</i>	relatively compact position
	<i>stand</i>	vertical elongated position
	<i>lie</i>	horizontal elongated position
Force dynamics domain	<i>sit</i>	medium degree of control and balance (upper torso), easily maintained
	<i>stand</i>	highest degree of control and balance (upper and lower torso); most difficult to maintain
	<i>lie</i>	lowest degree of control and balance, no physical effort to maintain
Active zone	<i>sit</i>	buttocks (and upper torso)
	<i>stand</i>	legs (and upper torso)
	<i>lie</i>	whole body
Social/cultural domain	<i>sit</i>	comfortable position either for working or relaxing
	<i>stand</i>	potentially most physically powerful position
	<i>lie</i>	associated with tiredness, sickness, sleep, death

Note: *sit*, *stand*, and *lie*, as used here, all refer to the maintenance of a posture

zone of the predicate *blink*, while a foot would be the active zone of the predicate *kick*. In the case of *sit*, the active zone which suggests itself is the buttocks and, to some extent, the upper torso, these being the parts of the body which appear to be most relevant to maintenance of the sitting position. In the case of *stand*, it is the legs in particular which are crucial, along with the upper torso which needs to assume a particular vertical shape. With *lie*, a side of the body would be the active zone since it is a side that typically comes into contact with a flat surface.

The states play very different roles in the socio-cultural domain. Sitting is a relatively comfortable position and combines both the opportunity to work with the hands, to look ahead and around easily, to eat and drink normally, while at the same time not becoming tired through prolonged exercise of the leg muscles. Standing allows a greater exercise of physical power, vision over a greater distance, and is a prerequisite for walking, running etc. Lying is the least compatible with physical action and is associated with rest, sleep, sickness, and death. We can summarize the key features of the three states as in Table 1.

3. Lexicalizations

Examples of other kinds of posture encoded as morphemes in their own right can be found in English *squat* and *crouch* (which could be considered as variants of sitting), *lean* (a variant of standing), and *recline* (a kind of lying). *Kneel* might be described as a kind of 'standing on one's knees'. Languages differ in the ways in which postures may be described by single lexical items. In Manam (Austronesian), we have separate lexical items *soaʔi* 'sit' and *basaʔi* 'sit cross-legged', whereas in English we must use the circumlocution *sit cross-legged* to convey this sense. Mithun (1998:165) reports five 'sit' verbs for Central Pomo (Amerindian): *č^hmáw* (used to describe a single person sitting on a chair), *bamáw* (used to describe a group sitting together on a bench), *ʔč^há:w* (used to describe a single person sitting on the ground), *nap^hów* (used to describe a group sitting on the ground, also 'to marry' in reference to a woman), and *č^hóm* (used to describe a container of liquid on a table).¹ Creek (Amerindian) distinguishes verbs of lying depending on whether the reference is to a round object, long object, flexible object, liquid, or living being (Haas 1948:244).

In French, the human postures are not expressed as simple verbs on a par with intransitive verbs like *dormir* 'sleep' and *venir* 'come'. Instead, the postures are expressed as syntactically more complex phrases consisting of *être* 'be' plus a word with stative meaning. These are *être assis(e)* (adjective and past participle of *asseoir* 'to seat, to put on a seat') 'to be in a sitting position', *être debout* (adverb meaning 'upright, on one's feet') 'to be in a standing position', and *être allongé(e)* (adjective and past participle of *allonger* 'lengthen, to stretch') 'to be in a lying

position'. The lack of a simple verbal category is relatable to the strong stativity of the three posture verbs which present a stable configuration and hence rate high on Givón's time-stability scale (Givón 1984: 51–6). As such, they are less verb-like and being encoded as adjectives or past-participles is consistent with this. English *be recumbent* has a similar complex structure, there being no single verb like **to recumber*.

Sitting, standing, and lying are postures we can maintain while engaged in various activities. For example, one can talk, lecture, write, read, and do most kinds of things while standing; similarly for sitting and lying, even though there may be some differences in the kinds of actions which can be carried out, depending upon the posture. Consistent with this experiential reality, posture may be expressed in language by means of verbal auxiliaries or verbal affixes accompanying a main verb, rather than as the main verb itself. In Diyari (Australian), for example, *ngama-* 'sit' participates in a compound verb construction in which it indicates that the action of the main verb is carried out in a stationary position (Austin 1998: 31). In Yuma (Amerindian), posture can be indicated in medio-passive verb forms by prefixes *t-* 'to do while sitting', *v-* 'to do while standing', and *a-* 'to do while walking or lying' (Halpern 1946: 274).

The dynamic postural meanings 'to sit oneself down', 'to move oneself into a standing position', and 'to lay oneself down' are closely connected semantically to the corresponding stative meanings and one and the same form may indicate either the dynamic or the stative meaning in languages. This holds in English to some extent. So, for example, *sit* can have dynamic or stative interpretations and *I sat on the chair* could mean 'I sat myself down on the chair' or 'I was sitting on a chair (and didn't move)'. Where there are distinct forms for the dynamic and stative, one of them may be derived from the other. The dynamic forms can be based on the stative verbs, as in the case of German: *sich setzen* 'to sit oneself down', the reflexive of *setzen* 'to set something/someone down', is historically derived from *sitzen* 'to sit (stative)'. Alternatively, the dynamic verbs may be the more basic ones, as in Usan (Papuan), where the dynamic verbs *bugâb* 'sit down', *naget* 'stand up', and *inâb* 'lie down' are basic. The stative meanings are expressed by putting the dynamic verbs into the continuative aspect (Reesink 1987: 132).

4. Syntax of the central meanings

Where a language makes a clear syntactic or morphological distinction between transitive and intransitive verbs (or their constructions), the posture verbs will be typically intransitive. This can be seen in Tongan (Austronesian), where a transitive construction requires ergative case-marking of the subject and an intransitive construction will have absolutive marking of the subject. Tongan *tangutu* 'sit', *tu'u*

'stand', and *tokoto* 'lie' behave like typical intransitive verbs in that they require their subjects to be in the absolutive case, marked by 'a in (1a). This contrasts with transitive verbs such as *kai* 'eat', as used in (1b), where the subject of the verb appears with ergative case marking 'e. In (1a), the locative preposition 'i is optional in casual speech before the definite article *he*. Note, however, that the subject remains in the absolutive case typical of subjects of intransitive verbs even when the locative preposition is omitted. In other words, the omission of the locative preposition does not alter the basic intransitivity of the *tangutu* clause.

- (1) a. 'Oku tangutu 'a Mele ('i) he sea.
 PRES sit ABS Mele LOC ART chair
 'Mele is sitting on a chair.' (Tongan)
 b. 'Oku kai 'e Mele 'a e ika.
 PRES eat ERG Mele ABS ART fish
 'Mele is eating the fish.' (Tongan)

Definiteness of reference may have a bearing on the presence or absence of an adposition in Swahili (Niger-Kordofanian) posture clauses as well. In Swahili (cf. Russell 1985:479–80), the posture verbs 'sit', 'stand', and 'lie' are basically intransitive predicates, occurring with locative complements, as in (2a), where the complement is marked with the locative suffix *-ni*. However, the locative suffix may be omitted as long as the location phrase has a definite reference, as in (2b).

- (2) a. Juma a-li-kaa kiti-ni.
 Juma he-PAST-sit chair-LOC
 'Juma sat on a/the chair.' (Swahili)
 b. Juma a-li-kaa kiti hiki.
 Juma he-PAST-sit chair this
 Juma sat on this chair.' (Swahili)

A locative adposition may be absent altogether, as in the case of Cantonese:

- (3) Léih chóh nī jēung yí lā.
 you sit this CL chair PART
 'Sit on this chair.' (Cantonese, Matthews and Yip 1994:136)

There are instances where the 'sit', 'stand', and 'lie' verbs in a language are associated with different morphosyntax. In Manam, for example, *tui* 'stand' is distinguished from *soaʔi* 'sit' and *eno* 'lie' with respect to aspectual facts. The 'sit' and 'lie' verbs are classified by Lichtenberk (1983:219) as 'state' verbs which have 'patient' subjects. Semantically, these verbs describe states or changes of state. The class also includes verbs with meanings such as 'be big, grow big', 'be bad, become bad', 'be broken, break (intr.)'. With such verbs, according to Lichtenberk (1983:219), the continuative aspect of Manam can mean that the state continues

to change, that the state habitually, repetitively changes, or that the state itself is habitual, repetitive. The continuative aspect with the 'state' verbs can not, however, mean that the state is in progress at the time of the speech act or at the time of another event. Nor can such verbs appear with the aspect associated specifically with this meaning, i.e. the progressive aspect. State verbs contrast with 'active' verbs which have agentive subjects. Examples of active verbs in Manam are the verbs meaning 'go', 'work', 'jump', 'speak', 'hit', 'give' and *tui* 'stand'. Thus, in Manam, 'stand' is aligned with verbs of action involving agents, whereas 'sit' and 'lie' are aligned with verbs describing states without agents. This separation between 'stand' on the one hand and 'sit' and 'lie' on the other hand correlates with different polysemy networks of the three verbs (cf. Newman ms.). The 'sit' and 'lie' verbs have additional stative kinds of usages as general locational predicates, existential predicates, (immediate) possession verbs, progressive aspect auxiliary (in the case of 'sit') and persistive aspect auxiliary (in the case of 'lie'). 'Stand', on the other hand, does not show this kind of polysemy in Manam. The extensive polysemy found with 'sit' and 'lie' is presumably relevant to the different behaviors of 'stand' and 'sit'/'lie' with respect to morphosyntax.

Javanese (Austronesian) verbal morphology also presents us with a separation of 'stand' and 'sit'/'lie'. Javanese verbal morphology is quite complex (cf. the overview in Uhlenbeck 1978:127–35; Suharno 1982:19–22, 28–45; Robson 1992:48–55), but here it will be enough to focus just on the presence or absence of a nasal prefix, represented as N-. This nasal takes on various forms, including *nge-* before monosyllabic roots (*cat* 'to paint' → *ngecat* 'paints'), a nasal substitution of an initial voiceless obstruent (*tulis* 'to write' → *nulis* 'writes'), and a nasal prefixed to a voiced obstruent or liquid or vowel (*gawe* 'to make, force' → *nggawe* 'makes, forces'). N- is strongly associated with more agentive, intentional meanings in Javanese. Most transitive verbs, for example, require N- in the active form, e.g. (*ng*)*ombe* 'drink', (*ng*)*anggo* 'use', (*ng*)*lorod* 'remove wax (in batik making)', *tulis/nulis* 'write', *cekel/nyekel* 'hold', (*ng*)*iris* 'cut', *colong/nyolong* 'steal', (*ng*)*rangkul* 'hug', but not the less agentive *weruh* 'see' and *krungu* 'hear'. Some intransitive verbs require the N-, such as *nari* 'to dance with particular type of movement' (cf. the corresponding noun *tari*), *njoged* 'dance, as a general term' (cf. the corresponding noun *joged*), *nembang* 'sing' (cf. *tembang* 'song'). Some other intransitive verbs can not occur with N-, such as *wahing* 'sneeze' and *watuk* 'cough'. The intransitive posture verbs behave as follows: the root *adek* 'to stand' patterns like the agentive intransitive verbs, requiring N- (*ngadek*); the roots *lungguh* 'to sit' and (*te*)*turon* 'lie', on the other hand, do not take N- in their intransitive uses. It is also worth noting that all three verbs *adek*, *lungguh*, and (*te*)*turon* are used for either the action or state sense ('move into a position' or 'be in a position'). This makes it impossible to explain the different behaviors of the three verbs by reference to different polysemies of the

three verbs. In this case, it may be that the different experiential realities associated with the three postures are relevant. One can think of the three postures as forming a kind of continuum 'stand' > 'sit' > 'lie' corresponding to the degree of sensorimotor control required to maintain the posture (cf. the discussion of the force dynamics domain above). Aligning 'stand' with the agentive kind of morphosyntax and 'sit' and 'lie' with the less agentive morphosyntax may be motivated by this kind of continuum of control (cf. Newman ms.; Noonan and Grunow-Hårsta, this volume; Rice, this volume).

5. Extensions based on the spatial profile

5.1. Posture-based locational expressions

The posture verbs may be extended to help conceptualize the position of some entity, as in *The computer sits on a table*, *The house stands on private property*, *Her clothes are lying on the floor*. Here, the posture verbs do not refer to humans sitting, standing, or lying, which I take to be the canonical states and which constitute the central meanings of the posture verbs. Rather, these sentences illustrate an extension of the central meanings of these verbs to non-human referents. I will call such expressions locational, since part of their meaning is to describe the location of an entity, though, as argued below, the posture verbs can carry additional nuances.

Languages differ in the extent to which the posture verbs can be extended to non-human referents. French, for example, seems to restrict its posture expressions, mentioned above, to animates. While English can utilize the posture verbs to refer to non-humans, their use in such expressions is limited. I will illustrate this kind of extension with each of the verbs *sit*, *stand*, and *lie*. Some of my own judgments concerning *sit* are shown below:

- (4) a. The dog/cat is sitting under the tree.
- b. The tadpole/snail is sitting on the bottom of the pond.
- (5) a. The computer/printer/telephone/TV sits on a desk at home.
- b. Our family photo/a precious vase/a little statue/an old lamp sits on the piano in our house.
- c. The new satellite sits above the Pacific.
- d. ?Our double-bed/coffee table/chair sits next to the window in the bedroom.
- e. ?The mattress is sitting on the floor.
- f. ?The skyscraper sits on a corner.
- g. ?The clothes are sitting on the floor.

In (4), we see *sit* extended to non-human animates. This extension works better with animals which can assume a position where some part of the body is lowered and in touch with, or is close to, the ground. This applies to the resting position of tadpoles with legs already formed, dogs and cats in a sitting position, snails whenever they are on a horizontal surface etc. It applies not at all to snakes which can lie but not sit. In (5) *sit* functions to help locate various non-animate entities. When an entity can be conceived as having “legs”, e.g., a bed, table, or chair, then *sit* becomes awkward, as in (5d). Human standing includes the image of straight, upright legs and to the extent we see a similar image in other entities, so we prefer *stand* to *sit*. When the horizontal or vertical extension of an entity is pronounced, *lie* or *stand* is preferable. For example, in (5e), the long, flat shape of a mattress requires *lie* rather than *sit*. In (5f), the tallness of a skyscraper requires *stand* rather than *sit* and in (5g) the horizontal expanse of the clothes requires *lie* rather than *sit*.

In (6) and (7) I have given my own judgements on some sentences with *stand*.

- (6) a. The horse/dog/cat is standing under the tree.
b. The bird/ostrich/flamingo is standing near the rock.
c. Our dog can stand (up) on two feet for about 3 seconds.
- (7) a. Our family photo/a precious vase/a little statue/an old lamp stands on the piano in our house.
b. Our double-bed/coffee table/chair stands next to the window in the bedroom.
c. The skyscraper/Pizza Hut stands on a corner.
d. ?The TV/the computer/the telephone stands on a desk in our house.

Note that even though a dog is longer horizontally than vertically when standing on all fours, *stand* is appropriate. Clearly, the fact that the animal has legs in an upright position is crucial in the examples (6a, b). When the legs are very small relative to the body, as in the case of a mouse, it is not obvious whether *sit* or *stand* is appropriate. A position for dogs, cats, mice etc. which is even more like the human standing posture is when they stand on their hind legs, a favorite “party trick” some dogs perform. Since *stand* is used for these animals when they are on four legs, *up* can be added to emphasize this more vertical kind of standing, as in (6c). In (7a), a vertical orientation underlies the objects referred to (the sentence would be less acceptable if the objects were lying on their side). The family photo, a precious vase, a little statue, etc. can all be said to *sit* or *stand* on a piano, table etc. an old lamp, but with slightly different nuances. The *sit* alternative, as in *A Chinese statue sits on the piano* feels almost like a term of endearment when compared with *stand* in *A Chinese statue stands on the piano*

which sounds to me rather stilted, more literary than colloquial, a little pretentious almost. (7b) is different in that the objects have parts to them which can be construed as "legs" and I believe this is the main reason for the use of *stand* here. A double-bed, for example, is relatively flat and low, but typically has legs. Similarly, the typical chair has legs and that is why chairs are said to *stand*. Where the vertical dimension is not so salient or the entity lacks legs, as with computers, telephones etc., then *stand* is less appropriate, as in (7d). If these objects were to have "legs" or something comparable to support them, on the other hand, then they would be similar to tables, chairs etc. and *stand* could be used.

- (8) a. The horse/dog/bird is lying on the ground.
- b. The sick goldfish is lying on the bottom of the tank.
- (9) a. The clothes are lying on the floor.
- b. The mattress is lying on the floor.
- c. Our family photo/a precious vase/a little statue/an old lamp lies on the piano in our house.
- d. Palmerston North lies north of Wellington.

Where it is contextually relevant to draw attention to the spatial orientation of the entity being located, the posture verbs prove useful. So, for example, a horizontal versus upright orientation of a book on a table is conveniently differentiated by *The book is lying on the table* versus *The book is standing (up) on the table*.

A language which makes more extensive use of the posture verbs in locational expressions is Dutch (cf. also Lemmens, this volume). The sentences below, based on Van Oosten (1982: 138), nicely illustrate the different preferences concerning locational expressions in English and Dutch. I have used bold to indicate the preferred option:

- (10) a. **There's a lamp** (standing) in the corner.
- b. **The book's** (lying) on the table.
- c. **The book's** (standing) on the shelf.
- d. **The clothes are** (lying) in the drawer.
- (11) a. **Er staat/is een lamp** in de hoek.
- b. **Het boek ligt/is op** de tafel.
- c. **Het boek staat/is op** de plank.
- d. **De kleren liggen/zijn** in de la.

In (10), either the independent 'be' verb, or the present progressive forms of 'stand' and 'lie' are possible. If there is a preference, it would seem to be the alternatives without the posture verbs that are preferable. However, English does not require that degree of specificity when referring to the location of an object like a book and the sentences in (10) minus the participles in parenthesis are the

more colloquial. Dutch also allows both ‘be’ and (main verb) ‘stand/lie’ alternatives in the corresponding sentences shown in (11). However, Van Oosten reports that the Dutch sentences with ‘be’ are much less idiomatic than the ‘stand/lie’ alternatives, the opposite preference to English.

In Mbay (Nilo-Saharan, Keegan 1997:75–6, this volume) existential constructions and predicative adjective constructions require one of the three verbs *ndi* ‘sit’, *dā* ‘stand’ and *tò* ‘lie’. A locative expression equivalent to ‘here is/are, there is/are . . .’ also builds upon these three verbs by requiring one of the specifiers: *ndin* for an object viewed as sitting, *dān* for an object viewed as standing, and *tèn* for an object viewed as lying. They are used in conjunction with a form *lā* which I gloss here as a locative:

- (12) a. mbētē lò-í lā tèn
 book poss-you LOC lying
 ‘Here is your book.’ (Mbay, Keegan 1997:76)
- b. wôt lò-í lā ndin
 cup poss-you LOC sitting
 ‘Here is your cup.’ (Mbay, Keegan 1997:76)
- c. bísá lò-í lā dān
 dog poss-you LOC standing
 ‘There is your dog.’ (Mbay, Keegan 1997:76)

In Manam, *soaʔi* ‘sit’ and *eno* ‘lie’ (but not *tui* ‘stand’) can both be extended to locational (when the subject is definite) and existential (when the subject is indefinite) constructions. Examples of these verbs used in this way are given below. Lichtenberk (1983:496) also notes that in these uses, *soaʔi* ‘sit’ is used with subjects whose referents are higher animals and boats at sea, while *eno* ‘lie’ is used elsewhere.

- (13) a. lóu nátu ámi-lo i-sóaʔi
 Lou child army-in 3SG.REALIS-sit
 ‘Lou’s son (child) is in the army.’ (Manam, Lichtenberk 1983:497)
- b. maʔási-lo ʔáti rúa di-sóaʔi
 sea-in canoe two 3PL.REALIS-sit
 ‘There are two canoes in the sea.’ (Manam, Lichtenberk 1983:498)
- c. ʔáti né-gu sarija-túʔa i-éno
 canoe poss-1SG close-INT 3SG.REALIS-lie
 ‘My canoe is very close.’ (Manam, Lichtenberk 1983:497)
- d. tabíra-lo údi di-éno
 dish-in banana 3PL.REALIS-lie
 ‘There are three bananas in the dish.’ or
 ‘The three bananas are in the dish.’ (Manam, Lichtenberk 1983:499)

Example (14) illustrates locational uses of posture verbs in Creek (Amerindian), taken from Watkins (1976:21).

- (14) a. šampat čoka oofan léékiis
 basket.SUBJ house inside.OBJ sit
 'The basket is in the house.' (Creek, Watkins 1976:21)
- b. asean spaaskat ahwii:is
 there.OBJ broom.SUBJ stand
 'The broom's over there.' (Creek, Watkins 1976:21)

5.2. Posture-based noun classification/specification

The postural distinctions between sitting, standing, and lying may also manifest themselves in demonstrative or articles appearing within the noun phrase. As demonstratives or articles they convey information about the spatial shape or orientation of the noun referent. Siouan (Amerindian) languages show evidence of this, as discussed in Watkins (1976) and Mithun (1999:116–17). In Euchee (Amerindian, also called Yuchi), the morphemes *ji* 'sit, stay', *fa* 'stand', and *ʔe* 'lie' form the basis of a three-way 'gender' system (Watkins 1976:35–6, Linn 2000). These same forms function as articles occurring with singular inanimate nouns, as illustrated in Table 2. Animate nouns do not participate in this kind of classification. Instead they are sub-classified according to categories of tribal affiliation, kinship, and gender.

Table 2. Euchee articles (based on Watkins 1976:35–6, Wagner 1933–1938:321–2)

<i>ji</i> 'sit' class	<i>fa</i> 'stand' class	<i>ʔe</i> 'lie' class
<i>yastadekʔōji</i> 'the chair'	<i>yafa</i> 'the tree'	<i>yaʔe</i> 'the log'
<i>tiji</i> 'the rock'	<i>yufa</i> 'the house'	<i>ʃaʔe</i> 'the field'
<i>cetapaxji</i> 'my strength'	<i>cewonefa</i> 'my spirit'	<i>ceʔeēʔe</i> 'the rain'
<i>ditaxji</i> 'my heart'	<i>dicifa</i> 'my eye'	<i>howedeneʔe</i> 'their language'

As is typical of classificatory systems, some members of the category are obviously related to the central meaning of the morpheme which is used to indicate the category, while other members are not. Thus, some of the words in the category based on *fa* 'stand' have an obvious vertical orientation such as 'tree' and 'house'; some words in the *ʔe* 'lie' category have an obvious horizontal orientation such as 'log' and 'field'; 'chair' in the *ji* class is closely related to the 'sit' sense of *ji*. The class based on *ji* 'sit, stay' extends to roundish things ('heart' for example) and also functions as the default class (cf. Linn 2000).

6. Extensions based on continuation through time

6.1. Stay, live

The meaning of 'sit' often occurs in polysemy with 'stay' and 'live' meanings, e.g. Maori *noho* 'sit, stay, live'. In Manthartha (Australian), a verb *kumpa-* occurs with the meanings 'sit, camp, stay, live, be' (Austin 1998). In Kiwai (Papuan), a 'continuous performance' aspectual suffix *-diro*, when added to *omi* 'sit' gives rise to 'stay' (Foley 1986:147, 148). Although it is 'sit' which is commonly associated with extensions to 'stay' and 'live', 'lie' can also have this kind of extension. In Ngankikurungkurr (Australian), for example, the verb *wibem/gibem* 'lie' can imply sleeping or camping (Hoddinott and Kofod 1988:131–2).

6.2. Continuative aspect

The posture verbs can be used as auxiliaries which simultaneously classify a subject referent in terms of posture as well as functioning as a tense/aspect/modality (TAM) marker. In Mbay (Nilo-Saharan, Keegan 1997:69–70), *ndì* 'sit', *dâ* 'stand', and *tò* 'lie', immediately before the main verb, are used to form the progressive aspect. As auxiliaries, they can occur with or without the subject pronoun prefixes, but they lack the subject number suffix. In many instances the auxiliaries combine the progressive meaning with the posture meaning. So, for example, 'I am working' constructed with the progressive auxiliary *ndì* refers to work being done while seated, whereas with the progressive auxiliary *dâ* it refers to work done while standing (cf. Keegan 1997:70, this volume). Of the three verbs, *ndì* 'sit' has the most general use, used with verbs expressing movement, perception, and communication. So, for example, 'I am going to the market' is constructed with the auxiliary *ndì* from the verb 'sit', rather than, say, *dâ* from the verb 'stand'.

The Kxoe (Khoisan) posture verbs function in this way, too, as described in Köhler (1962:545, 1981:530) and Heine *et al.* (1993). 'Sit', 'stand', and 'lie' all reportedly function as present tense markers especially referring to an action performed while sitting, standing, or lying respectively. The auxiliary morphemes, called variously suffixes and particles, are formed from the corresponding posture verbs, which are 'defective', i.e. do not conjugate and are only used in the present. [ɰ is a nasalized alveolar click; // is a lateral click.]

- (15) a. $\ne n\acute{u}\acute{u}$ 'sit' : $\ne nu\grave{e}$, 'present tense particle, in sitting position'
- b. $t\acute{e}$, $t\acute{i}$, 'stand, be' : $\ne t\grave{e}$ 'present tense, in standing position'
- c. $//o\grave{e}$ 'lie, be lying' : $//o\grave{e}$ 'present tense marker' (in Heine *et al.* 1993:139 called 'present tense, habitual')

- d. $\neq n\check{n}\check{u}$ 'sit' : $-n$ 'present tense particle, in sitting position or in general'
- (16) a. tí mǔũ à $\neq nu\grave{e}$
 1SG see PART sit
 'I see (while sitting).' (Kxoe, Köhler 1962:545; Heine *et al.* 1993:139)
- b. tí mǔũ à tè
 1SG see PART stand
 'I see (while standing).' (Kxoe, Köhler 1962:545; Heine *et al.* 1993:139)
- c. tí mǔũ à $-||o\grave{e}$
 1SG see PART lie
 'I see (while lying).' (Kxoe, Köhler 1981:530, Köhler 1962:545; Heine *et al.* 1993:139)

In Tunica (Amerindian, Haas 1941; Watkins 1976:29–33), *-na* 'sit' and *-ra* 'lie' verbs function as auxiliaries with active verbs meaning continuous or incompleted aspect, together with a postural meaning. Male and female agents follow different patterns in the singular and dual. The pattern for single male agent is based on a horizontal vs. non-horizontal dichotomy while the pattern with single female agent is based on a sitting vs. non-sitting dichotomy as shown in Table 3. Same-gender duals pattern the same as for the singular of the gender, but the male-female dual patterns structurally like the female category. All animate plurals follow this pattern, i.e., the female, as well.

Table 3. Tunica auxiliaries (based on Watkins 1976:25–7 and Haas 1941)

	Single male	Single female
Continuous aspect, sitting	<i>-na</i>	<i>-na</i>
Continuous aspect, vertical	<i>-na</i>	<i>-ra</i>
Continuous aspect, horizontal	<i>-ra</i>	<i>-ra</i>

In Urubu-Kaapor (Tupi), there are four aspect markers which indicate posture or movement and are invariably translated as progressive aspect (in contrast to aspect of completed action and iterative aspect), as discussed by Kakumasu (1986:386): *-xo* 'moving', *-i* 'sitting', *-am* 'standing', *-u/-ju* 'lying down'. As auxiliaries, they take a pronominal prefix agreeing in number and person with the subject (in the 3rd person, there is no number distinction).

- (17) a. wapyk u-ĩ
 3.sit 3-sit.AUX
 'He is sitting.' (Urubu-Kaapor, Kakumasu 1986:386)

- b. harō u-ĩ
 3.wait 3-sit.AUX
 ‘He was waiting sitting down.’ (Urubu-Kaapor, Kakumasu
 1986:386)

In the preceding examples, the postural meaning is maintained along with the extension to a TAM meaning. But the posture verbs may develop TAM meanings without any trace of the original postural meaning. Manam, *soaʔi* ‘sit’ is extended to express the progressive aspect, referring to an event that is in progress at the time of the speech act or the time of another event (Lichtenberk 1983:197–8). The main verb appears in a reduplicated form, characteristic of the continuative aspect in Manam. Lichtenberk is quite specific about the absence of the central meaning ‘sit’ in this auxiliary usage (Lichtenberk 1983:198), as is evident in the examples below. The verb *eno* ‘lie’ also functions as an auxiliary, but in this case to indicate persistive aspect, i.e. indicating that the event is performed persistently. The construction requires the main verb to be suffixed with the ‘limiter’ *-la*, whose basic meaning is ‘only, just’. In the case of the persistive aspect, the *eno* auxiliary is inflected for 3rd person singular always, indicating that it is the whole clause preceding it which functions as the subject. The main verb stem may or may not be reduplicated.

- (18) a. siresĩre di-bulabula-ĩ-be di-sóaʔi
 grass 3PL.REALIS-set.RDP-3SG.OBJ-and 3PL.REALIS-sit
 ‘They are burning grass.’ (Lichtenberk 1983:199)
- b. di-gon̄=góm-be di-sóaʔi
 3PL.REALIS-perform *gon̄góm*.RDP-and 3PL.REALIS-sit
 ‘They are performing gonggong’s (humorous pantomimic sketches).’ (Lichtenberk 1983:198)
- c. i-pile-lá-be i-éno
 3SG.REALIS-speak-LIMITER-and 3SG.REALIS-lie
 ‘He kept talking.’ (Lichtenberk 1983:200)
- d. ʔáiʔo ʔu-malipilipi-lá-be i-éno
 2SG 2SG.REALIS-work.RDP-LIMITER-and 3SG.REALIS-lie
 ‘All you do is work.’ (lit. ‘your working lies/persists’)
 (Lichtenberk 1983:200)

The extension of the posture verbs to pure progressive marker has been noted for many languages (cf. Heine *et al.* 1993). Austin (1998) discusses the extension of the posture verbs to tense/aspect markers in a number of Australian languages. In Manthartha (Australian), a verb *kumpa-* occurs with the meanings ‘sit, camp, stay, live, be’ as well as tense/aspect meanings of ‘non-punctual, continuous’ (Austin 1998:24). Here, Austin, following Bybee *et al.* (1994:127), explains *continuous* as:

"continuous views the situation, whether it be dynamic or stative, as ongoing at the reference time." These uses of *kumpa-* are illustrated below:

- (19) a. ngatha kumpa-artu tharla-rnu papa-jaka
 1SG.NOM sit-USIT feed-IMP.F.SS water-COM
 'I used to feed (him) with water.' (Manthartha, Austin 1998:24)
- b. warlartu ngarlpurri-nyja kumpa-yi martura
 eaglehawk.NOM run-PAST sit-PURP.SS middle.LOC
 yanga-rnu
 chase-IMP.F.SS
 'Eaglehawk ran and chased possums in the middle.' (Manthartha, Austin 1998:28)

The grammaticalization of 'stand' to progressive or durative kinds of aspectual marking in some Romance languages is relevant here. In Spanish, the copula *ser* is said to denote permanent characteristics such as identity and nationality, contrasting with *estar* (< 'stand') denoting (permanent or temporary) position, temporary states, and with a past participle, states resulting from an action. The contrast is more complex than this simple description suggests (cf. the extensive discussion in King 1992:99–129), though the idea of impermanence is certainly relevant in the use of *estar*. The sense of impermanence in the aspectual extension of 'stand' may be related to the experiential reality whereby the standing position for humans is the most difficult to maintain over long periods.

Habitual meanings can also be expressed by the posture morphemes. An intermediate stage is Dutch *liggen te* + INF which expresses the habitual meaning "with postural connotations" and Kxoe //oě 'lie, be lying' which expresses the meaning of present tense, habitual suffix ("expressing an action performed while lying"), based on Heine *et al.* (1993:139). Dutch *zitten te* + INF functions similarly but apparently without any particular postural connotations (Heine *et al.* 1993:201). 'Sit' functions as an habitual auxiliary in Kanakuru (Afro-Asiatic, Heine *et al.* 1993:201). Caughley (1982:110,113) notes that Chepang (Tibeto-Burman) *jhuŋ* 'squat' is used to form a repetitive suffix, translating as 'often'. 'Sit' helps to make a 'customary' serialization construction in Yankunytjatjara (Australian, Goddard 1985:207). Goddard describes the role of 'sit' in this construction as "an auxiliary providing aspect-like modification for a verb in serial form" (Goddard 1985:206). Case marking of the subject (ERG in the example below) is determined by the verb in the serial form (here 'chop'), rather than the 'sit' verb:

- (20) wati-ngku kalɪ atu-ɾa nyina-nyi
 man-ERG boomerang.ACC chop-SERIAL sit-PRES
 'The man makes boomerangs.' (Yankunytjatjara, Goddard 1985:207).

Foley (1986:144) comments that 'sit', 'stand', and 'lie' are commonly used for

“extended” aspect in the Papuan languages. Also, the Lango verb *bèdò* ‘sit’ functions as an auxiliary indicating iterative aspect (Noonan 1992:140).

‘Sit’, ‘stand’, and ‘lie’ are all found with progressive, durative type extensions, as exemplified above. The table below offers a summary of the facts from a number of languages in which such extensions are found. From this summary, ‘sit’ would appear to be a more common source for these extensions than ‘stand’ or ‘lie’, though a more comprehensive and systematic survey is needed to confirm the general validity of this result. The posture verbs can develop into interestingly different kinds of TAM markers in languages and more research is needed in order to write a full account of the different grammaticalization paths that each of the posture verbs can follow (cf. Kilian-Hatz, this volume, and Lichtenberk, this volume).

Table 4. Progressive and habitual extensions of the posture verbs (based on Heine *et al.* 1993, Austin 1998, Watkins 1976, and Lichtenberk 1983)

	‘sit’	‘stand’	‘lie’
Dutch (Germanic; Heine)	habitual	progressive	habitual + posture meanings
Danish (Germanic; Heine)	progressive		
Italian (Romance; Heine)		(intensive) progressive	
Spanish (Romance; Heine)		durative	
Diola Fogy (Niger-Congo; Heine)	past progressive		
Kanakuru (Chadic; Heine)	habitual		
Kxoe (Khoisan; Heine)	present/progressive + posture meaning (suffix)	present + posture meaning; present/	present/habitual + posture meaning
	present tense (particle)	progressive + posture meaning	
Ngambay-Moundou (Central Sudanic; Heine)	progressive	progressive	
Nobiin (Nilo-Saharan; Heine)	durative		
Lango (Nilo-Saharan; Noonan)	iterative		
Mamvu (Central Sudanic; Heine)	past progressive		
Shona (Central Bantu; Heine)	durative, habitual		

Tatar (Altaic; Heine)		progressive	progressive
Tibetan (Tibetic; Heine)	progressive		
Diegueño (Hokan; Heine)		progressive	
Tunica (Gulf isolate; Watkins)	progressive or incompleted		progressive or incompleted
Dakota (Sioux; Watkins)		progressive (inanimate)	
Yankunytjatjara (Central Australia; Austin)	customary		
Manthartha (North-west Western Australia; Austin)	non-punctual, continuous		
Djapu (dialect of Yolngu, Arnhem Land; Austin)	durative	durative	durative
Diyari (North-east, South Australia; Austin)			recent past (< 'lie' (inanimate))
Manam (Oceanic; Lichtenberk)	progressive		persistent

7. Extensions based on balance and control

As mentioned above, and as discussed by Gibbs (this volume), 'stand' involves more bodily control than does 'sit' or 'lie'. Recall the discussion of Javanese, where 'stand' (but not 'sit' or 'lie') occurs with the agentive N- prefix. Examples of the use of English *stand* relating to some form of balance and control are given below.

- (21) a. You should stand by your friends in times of need.
b. One can't stand in the way of progress.
c. There is no need to stand on ceremony here.
d. I can't stand loud music.
e. It only stands to reason.
f. Where do you stand on the issue of abortion?
g. The company stands to make quite a profit/loss.

In (a) and (b), there is a sense of strength which builds upon the balance and control inherent in the central meaning of 'stand'. It is standing, rather than sitting or lying down, which is most effective in physically resisting or dominating others.

In (d) *stand* is used to express the ability to withstand or cope with some adverse situation. In (e), there is a similar sense but in a more abstract sense in that some proposition can withstand scrutiny or closer examination. In (f), *stand* refers to a position as in a debate or argument with the connotation that one would be prepared to defend that position. In (g), the control element has all but disappeared. Here *stand* suggests that the company is very likely heading for a new financial position. The balance and control of the literal ‘stand’ sense has been bleached here to the connotation of the strong predictability of the future situation.

A ‘stand’ morpheme can easily be extended to abstract senses, including psychological senses, which involve some kind of control: for example, English *insist* and *persist* derive ultimately from the reduplicated ‘stand’ stem of Latin *sistere* ‘to set, place, stop, stand’. Prefixed forms of a verb ‘stand’ are common in the Germanic languages with a variety of meanings. Especially interesting is the use of ‘stand’ morphemes in words meaning ‘to understand’ where the concept of control and balance may be present, extended from the physical domain to the mental domain (cf. Newman 2001). Thus, we find English *understand* (< Old English *understandan* ‘understand’) and Old High German *fir-stantan* and *in(t)-stantan*, both meaning ‘understand, know, think’. Old Irish *hiress* ‘belief’ is said to derive from an Indo-European prefix *[p]eri (=Greek *peri* ‘about, around, encircling close at hand, adjacent, near’) and *stá* ‘stand’ (Lewis and Pedersen 1937:26, 266; Pokorny 1959:1005).

8. Miscellaneous extensions

8.1. Non-activity ‘sit’

An extension of English *sit* to what may be called “non-activity” is illustrated below:

- (22) a. The dirty plates are sitting on the table, waiting for someone to take them away.
- b. The new car is sitting in the garage until it is registered.
- c. The books are sitting on the shelf gathering dust.
- d. The cans of beer are sitting in the cupboard, just waiting for someone to drink them.
- e. The plane is just sitting on the runway in the heat, waiting for clearance to take off.
- f. The director is sitting on the new proposal.
- g. ?Our empty holiday home is just sitting there in Taupo, waiting for someone to live in it.
- h. ??The clothes are just sitting on the floor, waiting for someone to pick them up.

In (22) *sit* is extended to refer to a stationary position of the entity, but with a nuance suggesting that the entity is underutilized, out of use, useless etc. The nuance is enhanced with modifiers like *just* or by adding additional structure which points to the problem with the entity. In this usage, the actual shape of the entity does not seem particularly relevant as can be seen from the variety of entities referred to. Notice in (22c,d) for example, that the entity referred to (books on a shelf, cans in a cupboard) is vertically extended in their typical orientation. The sentences are quite acceptable to describe these entities in their typical upright orientation. (22f) is intended in the sense of the director not taking action with respect to a proposal. (22g) seems possible, not but not quite as felicitous as the preceding examples and (22h) even less so. Possibly *lie* is too strongly entrenched in connection with the image of clothes spread out on a floor and *sit*, even in the particular sense intended, can not successfully compete with *lie*. This contrasts with the possibility of using *sit* to describe the books on the shelf as they gather dust. Although *stand* can be used to describe an upright position of books on a shelf, this usage is not colloquial or common and so does not present any real conflict with *sit*. This usage relates to the static nature of literal *sit*.

8.2. Good-fit 'sit'

In some uses, English *sit* seems to refer to a position which represents a tidy arrangement or "good fit", as in (23). Clearly, it is not the shape of the object itself which allows *sit* to be used in these cases. Rather, it seems to be the image of entities fitting into a certain space which is the salient factor.

- (23) a. The dipstick sits (nicely) inside the long tube made for it.
- b. The memory chip sits (neatly) inside a little space made for it.
- c. Our house sits (snugly) between two adjoining ones.

In its central meaning, *sit* typically refers to a comfortable posture for humans and this could be part of the motivation for the extension to inanimates positioned tidily or snugly.

8.3. Possessive 'sit'

'Sit' is a source for expressing the idea of possession. The word *possess* itself is built upon Latin *posse* 'to be able to' + *sedere* 'to sit'. German *besitzen* 'possess' consists of the transitivizing prefix *be-* + *sitzen* 'to sit'. Atakapa (Amerindian, Watkins 1976:27–8) uses the posture verb *ke* 'sit' to make a possessive construction: *hike* 'I possess', *nake* 'you possess', *hake* 'he possesses'. The idea of possession may be motivated by the ideas of continuation and attachment to a fixed object inherent in the central meaning of 'sit'.

8.4. Intransitive marker ‘sit’

Wardaman (Northern Territory, Australia) employs the ‘sit’ morpheme, *jingi-*, as an auxiliary in a construction made up of “verb particle” + auxiliary. The “verb particle” is where the main verbal content of the clause is located, while the auxiliary carries the inflection and a variable amount of semantic content. Regardless of just what semantic contribution the auxiliary makes to the meaning, it serves to establish the syntactic transitivity or intransitivity of the clause. The following examples may help to illustrate this construction:

- (24) a. marluga yurrb-a Ø-jingi-ndi-yawu
 old man.ABS stand-SUFFIX 3SG-sit-PAST-NAR
 ‘The old man was standing.’ (Wardaman, Merlan 1994:537)
- b. lurle yid-jingi-ndi go na
 cry 1EX.NONSG-sit-PAST 3SG-DATIVE [English ‘now’]
 ‘We cried for her now.’ (Wardaman, Merlan 1994:505)

The main verb in (24a) is the ‘stand’ word *yurrb-a*, consisting of the ‘stand’ morpheme plus a verb particle suffix *-a*. In (24b) the main verb is *lurle* ‘cry’. The auxiliary word in each case follows the main verb and in each example it is *jingi-*, along with its inflectional affixes. Clearly, in (24a), *jingi-* can not be understood as meaning literal ‘sit’, since the resultant meaning of the verbal group is ‘stand’. Both clauses, however, are unambiguously intransitive. Merlan (1994:202) characterizes syntactic intransitivity as a clause structure in which there is only one pronominal adjunct in the (here, auxiliary) verb and a function of the *jingi*-auxiliary is to carry that information.

There are various verbal morphemes (e.g. ‘get’, ‘see’, ‘hit’, ‘fall’) which have this dual function of lexical verb and auxiliary verb and there are restrictions on the co-occurrence of auxiliaries and verbal particles. Also, some of these auxiliaries function as carriers of transitivity, with two pronominal adjuncts (e.g. ‘put, get’, ‘see’). Merlan (1994:207) singles out the transitive vs. intransitive pair of auxiliaries *gi-* (‘put’ as a independent verb) vs *jingi-* as a common pairing. The use of one or the other of these auxiliaries distinguishes transitive and intransitive syntactic structures with the same verbal particle. Some of the transitive/intransitive pairs created with the help of these auxiliaries are: ‘put to boil/boil’, ‘hang up/be hanging’, ‘seat/be seated’, ‘hide/be hidden’, ‘lean against/lean’, ‘put to sleep/sleep’, ‘conceal/be concealed’, ‘put belly up/be belly up’.

8.5. Honorific ‘sit’, ‘stand’, ‘lie’

Swadesh (1946:322) discusses the auxiliary use of posture verbs in Chitimacha (Amerindian). In this language there are two auxiliaries which distinguish posture

of the singular referent, *či(h)* 'standing' and *pe(h)* 'lying', and one which is neutral with respect to posture, *hi(h)*. The auxiliaries function as honorific morphemes. When applied to humans, the 'lying' carries derogatory or abusive nuances including insult, sarcasm, disparagement, joking, abuse, and defiance while, in a milder way, the 'standing' auxiliary indicates respect. The *hi(h)* morpheme is neutral in terms of respect. So, for example a sentence which is literally 'He stands dead' is taken to indicate respect towards the deceased, while a sentence meaning literally 'He lies dead' would be very disrespectful towards humans and should normally be used only when referring to animals.

Note also that in Manam 'lie' is used with lower animals and 'sit' with higher animals when these verbs are used in locational, existential, and possessive constructions (Lichtenberk 1983:496). The higher animals include human beings, pigs, dogs, goats, horses, and birds.

9. Conclusion

In my overview of posture verbs I have drawn attention to a selection of properties of these verbs as seen across languages. 'At rest' meanings, as found with verbs like *sit*, *stand*, and *lie*, might seem at first unremarkable on account of their apparent simplicity and may appear unworthy of close study. I hope to have shown, however, that these verbs and their counterparts are, in fact, well worthy of study. The study of these verbs on all levels of analysis is rewarding: the lexicalization of these concepts, the basic clause structure they occur in, their figurative extensions, and their grammaticalizations.

By considering 'sit', 'stand', and 'lie' meanings together, one is better able to appreciate their commonalities as well as their differences. Taking the time to reflect on the experiential realities which accompany our everyday experiences of sitting, standing, and lying, as was done at the beginning of this chapter, is a simple but helpful exercise to remind ourselves about what is involved in maintaining each of these postures (cf. Gibbs, this volume). Experiential realities can sometimes, though not always, be understood as motivating the linguistic facts.

Clearly, not every language makes use of 'sit', 'stand', and 'lie' verbs to the same extent. English *sit*, *stand*, and *lie*, for example, do show a range of extensions from the basic posture senses, but none of these three verbs has grammaticalized into auxiliaries, demonstratives etc. A full appreciation of these verbs and how they can develop requires a cross-linguistic approach, as has been followed here. Even so, the overview presented here is no more than a rough outline of the possibilities, highlighting some of the key linguistic facts associated with these verbs from what is no more than a small selection of the world's languages.

Abbreviations

ABS=absolute; ACC=accusative; ART=article; AUX=auxiliary; CL=classifier; COM=comitative; ERG=ergative; EX=exclusive; IMPF=imperfective; INT=intensifier; LOC=locative; NAR=narrative; NOM=nominative; NONSG=non-singular; OBJ=object; PART=particle; PL=plural; POSS=possessive; PRES=present; PURP=purposive; RDP=reduplication; SG=singular; ss=same subject; SUBJ=subject; USIT=usitative.

Notes

1. Mithun refers to these forms as verbs in their own right, but one should note that they consist of multiple morphemes: *č^hmáw*, for example, consists of *č^h* 'sit', *-má* 'be over', and *-w* 'perfective' (Mithun 1998:173).

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CHAPTER 2

Semantics and combinatorics of ‘sit’, ‘stand’, and ‘lie’ in Lao*

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1. Introduction

An implied (though not necessarily intended) premise of this volume is that the lexical meanings ‘sit’, ‘stand’, and ‘lie’ are both basic and universal. Accordingly, this chapter begins with a discussion of the problem of semantic/conceptual ‘basicness’ and its relation to semantic/conceptual universality. The chapter then sticks to grammatical/semantic description, the primary object of which is a set of examples of the Lao basic posture verbs *nang1* ‘sit, be seated’, *jùn3* ‘stand, be standing’, and *nòdn2* ‘lie, be lying’, from a corpus of spoken Lao texts.¹ The issues dealt with include aspect-modality marking, internal aspectual semantics, valence properties, and accessibility to various complex expressions (such as adverbial constructions). The scope of the chapter is delimited to ‘literal’ meanings of the posture verbs.

In a typology such as could emerge from this volume, Lao provides one of the least exotic cases, being one example of a language in which the three posture verbs show no unusual ‘extended’ scope of meaning, and none of the more grammaticalized functions observed in other languages.²

2. ‘Basicness’, cross-linguistically or otherwise, of the three posture verbs

In what sense may the three posture terms — ‘sit’, ‘stand’, ‘lie’ — be regarded as ‘basic’? Among a set of words describing posture in a language, they could be *semantically simple*, in that they have fewer entailments than other posture verbs. Thus, it could be that ‘sit’ contains fewer semantic specifications than, and may be subsumed by, say, ‘squat’. Demonstrating this would be a matter of defining the positive semantic specifications of the full range of posture words, and then comparing their respective semantic structures. Another, perhaps more general sense in which the three posture verbs may be regarded as ‘basic’ would be in their

representing something *cognitively* more simple. From the point of view of some researchers, this cognitive simplicity is not distinct from the question of semantic simplicity just mentioned — for example, where one's theory 'equates meaning with conceptualization' (Langacker 1987: 5). But different research traditions take different stands on this point, attributing different degrees of relatedness to given pairs of semantic (i.e. linguistic) and conceptual (i.e. cognitive) structures (Levinson 1997). The problem of assuming cognitive 'basicness' is loaded with important theoretical difficulties. Let us consider just two claims about 'basicness'.

'Basic' can be interpreted to mean 'unelaborated', implying some kind of conceptual starting point upon which further conceptual elaborations (reflected in more elaborated semantics in a given language) are based (Johnson 1987, Lakoff 1987). This has obvious ontogenetic implications. With regard to posture, the putative starting points — 'unelaborated' conceptual templates — could be conceived to arise from mechanical facts about the human physique and its interaction/engagement with gravity and space. The claim would be that the prototypical (and thus 'basic' or unelaborated) concepts of 'sitting', 'standing', and 'lying' are inherently constrained and/or determined by biological facts about the human species and our terrestrial fate. Now some may take a claim that the structure of the human body defines the basic postures to lead to a further claim (unjustified, I argue) that the basic postures are not only environmentally universal (given the human body as a cross-culturally stable aspect of the environment), but must therefore also be *conceptually* universal. However, an environmental universal entails neither a conceptual nor a semantic universal. Signifiers signify *concepts*, and concepts are in the mind. While facts about the world provide for speakers' abstractions and categorizations, it is not the case that words *are labels for* things in the world. Not even things as environmentally salient, universal, and denotationally unequivocal as 'sun' and 'moon' have semantically equivalent linguistic representations across languages (Dixon 1980: 104, Wierzbicka 1992: 8; cf. Nida 1945, 1947, Goddard 2001). An assumption that there are three universal environmental features (i.e. 'sitting posture', 'standing posture', 'lying posture') which are simply 'labelled' in given languages misses a crucial step between 'environment' and 'referent of label'. We label not environmental features (i.e. real instantiations of people 'sitting', 'standing', 'lying down'), but associated or derived *concepts*, which are not worldly artefacts but categories constructed by people. He who asks *How do you say 'sit', 'stand' and 'lie' in your language?* assumes that translation from English into the target language is possible. This may not be a bad assumption, as long as we are not too strict about the accuracy of translation — but more importantly, even if something called 'sitting' *could* be extensionally defined, it would *not* be this extensional definition that is labelled by words such as English *sit* and Lao *nangl*. These words label *concepts*, produced by people.

So what are our terms of cross-linguistic comparison? When we use English *sit*, *stand*, *lie* as direct glosses for non-English words without considering possible subtle (or not so subtle) distinctions, we are in danger of misleading both ourselves and our readers that the 'basic' concepts expressed by speakers of different languages *are* semantically equivalent (but perhaps differing in minor details of grammatical behavior and extensional range). One response to this might be that in cross-linguistic research, *sit*, *stand*, and *lie* are not meant to represent English words, but are technical terms for the postures.³ How then are these 'basic postures' to be defined? As stated already, they cannot be defined extensionally, because the referent is not in the world but in the mind, and no direct correspondence between these can be automatically assumed. Thus, throughout this chapter, by glossing the three Lao words as 'sit', 'stand', and 'lie', I do not mean that they are identical in meaning with the English words, and indeed I would be surprised if they were.

3. The three posture verbs in Lao

The Lao verbs *nang1* 'sit', *jùun3* 'stand', and *nòon2* 'lie' are run-of-the-mill verbs, relatively infrequent in a large corpus of Lao spoken texts, as shown in Table 1. Verbs in Table 1 which appear in the corpus more than 400 times (i.e.

Table 1. Sample of some common verbs in a corpus of spoken Lao (Enfield 2000)

More than 100 occurrences			30–100 occurrences			Less than 25 occurrences		
<i>paj3</i>	‘go’	(1181)	<i>taam3</i>	‘follow’	(95)	<i>ñok1</i>	‘lift, pick up’	(23)
<i>maa2</i>	‘come’	(1049)	<i>saj4</i>	‘use’	(86)	<i>tom4</i>	‘boil’ (tr.)	(22)
<i>juu1</i>	‘be.at’	(1044)	<i>bòòk5</i>	‘tell’	(96)	<i>suaj1</i>	‘help’	(22)
<i>daj4</i>	‘acquire’	(881)	<i>jaan4</i>	‘scared’	(76)	<i>tùun1</i>	‘wake/start’	(18)
<i>mii2</i>	‘there is/have’	(841)	<i>nòon2</i>	‘lie’	(63)	<i>tèèk5</i>	‘break’	(17)
<i>haj5</i>	‘give’	(605)	<i>nii3</i>	‘flee’	(60)	<i>thim5</i>	‘discard’	(15)
<i>qaw3</i>	‘take’	(567)	<i>hap1</i>	‘receive’	(56)	<i>liaw4</i>	‘turn’	(12)
<i>hêt1</i>	‘do/make’	(433)	<i>thaam3</i>	‘ask’	(56)	<i>lom4</i>	‘fall over’	(12)
<i>kin3</i>	‘eat, consume’	(311)	<i>sùu4</i>	‘buy’	(55)	<i>fòon4</i>	‘dance’	(11)
<i>vaw4</i>	‘say’	(292)	<i>qaan1</i>	‘read’	(54)	<i>lùak4</i>	‘select’	(10)
<i>haa3</i>	‘seek’	(237)	<i>cap2</i>	‘catch’	(54)	<i>jiap5</i>	‘flatten’	(10)
<i>hian2</i>	‘study, learn’	(185)	<i>song1</i>	‘send’	(52)	<i>haaj3</i>	‘disappear’	(9)
<i>jaak5</i>	‘want to’	(166)	<i>khaam5</i>	‘cross over’	(48)	<i>qaap5</i>	‘bathe’	(7)
<i>huu4</i>	‘know’	(121)	<i>nang1</i>	‘sit’	(47)	<i>noon2</i>	‘throw’	(6)
<i>fang2</i>	‘listen’	(110)	<i>lèn1</i>	‘run’	(42)	<i>sùang1</i>	‘conceal’	(5)
<i>long2</i>	‘descend’	(110)	<i>saang5</i>	‘build’	(33)	<i>jùun3</i>	‘stand’	(5)
<i>tòd1</i>	‘connect’	(108)	<i>sua1</i>	‘believe’	(32)	<i>bin3</i>	‘fly’	(3)
<i>taaj3</i>	‘die’	(101)	<i>tat2</i>	‘cut’	(31)			

‘go’, ‘come’, ‘be at’, ‘acquire’, ‘there is’, ‘give’, ‘take’, and ‘do/make’) do so because they serve relatively general ‘extended’ grammatical functions. None of the cross-linguistically common ‘extended’ functions of ‘sit’, ‘stand’, and ‘lie’ (e.g. marking aspect or modality, existence, event- or nominal-classification), are observed in Lao. Nor do these Lao verbs even predicate location in any general sense independent of physical posture. In 2000, I worked with Lao speakers in Vientiane using materials which were designed to elicit particular positional location expressions (LCG/MPI 1999) — for example, illustrations contrasting bottles ‘lying’ versus ‘standing’ on a table. While verbs like ‘sit’, ‘stand’, and ‘lie’ are a standard feature of such expressions in some languages (e.g. Dutch; Stern 1979:5), I found by contrast very few comparable uses of the posture terms in Lao. For, example, *tang4* ‘set up, be erected’ is normal where one might expect ‘stand’ in many other languages (e.g. for *The bottles are standing on the table*).

In most of the text examples of *nòdn2* ‘lie’ referred to in Table 1, the meaning is not ‘lie’, but an ‘extended’ meaning such as ‘sleep’ or ‘stay/live (somewhere)’. There are perhaps only 6 genuine examples in the corpus of *nòdn2* meaning simply ‘be in a lying posture’, about the same low frequency of *jùnn3* ‘stand’. No ‘extended’ usages are found for *jùnn3* ‘stand’ at all, and there are only a few ‘extended meaning’ examples of *nang1* ‘sit’ (e.g. in idioms referring to political rule; cf. English *throne* and *seat of power*).

3.1. Combinatoric properties

We begin by examining accessibility of the three verbs to various grammatical behaviors. Being ordinary verbs, they participate in a much wider range of constructions than can be described here — I discuss only those cases which seem interesting in the context of this volume.

3.1.1. Logical/aspectual properties

First, *nang1* ‘sit’, *jùnn3* ‘stand’, and *nòdn2* ‘lie’ are defined as verbs because they take the negation marker *bò0*, as well as other aspect-modality markers which define the class (e.g. *kamlang2* ‘progressive’ and *si0* ‘irrealis’):

- (1) qee4 bò0 daj0 nang1 cak2 thua1 naa3
INTJ NEG ACHV sit how.many.times PCL
‘Yeah, (she) didn’t sit (down) once.’ (209)
- (2) laaw2 kamlang2 jùnn3 juu1 nòdk4
3 PROG stand be.at.outside
‘S/he’s standing outside.’

- (3) khòòj5 si0 nòòn2 juu1 nii4
 1 IRR lie be.at here
 ‘I’ll lie/sleep here.’

The three posture verbs have membership in two major verb classes (defined in terms of ‘logical/aspectual’ properties; Dowty 1979), namely the ‘state’ class and the ‘accomplishment’ class (see Enfield in press a:79 for more details); see Table 2.

Table 2. Some Lao verb categories based on aspectual properties

	‘VP at t’ entails ‘sth. happened at t’?	‘VP-PFV’ entails ‘VP now’?	‘PROG-VP’ entails ‘VP-PFV’?	‘begin to V’ grammatical? (with non-iterative reading)	‘almost V’ ambiguous?	Reduplication grammatical?
Achievement (‘meet someone’)	+	–	–	–	–	–
Activity (‘walk’)	+	–	+	+	–	–
Accomplishment (‘build a house’)	+	–	–	+	+	–
State (‘have something’)	–	+	–	–	–	–
Gradable state (‘be tall’)	–	+	–	+	–	+

The logical/semantic relationship between verbs of the accomplishment and state classes should be fairly clear (cf. Dowty 1979: Chapter 2, especially §2.2, §2.3.2, §2.3.6) — specifically, an accomplishment contains in its complex structure an activity which results in inception of a state, and therefore realization of the predicate as a whole entails realization of a resultant state (thus, *I have knitted a scarf* entails the *existence* of the scarf). So, if you have ‘stood (up)’, then you are ‘standing’; if you have ‘sat (down)’, then you are ‘sitting’. This verb-internal structure may be illustrated as follows, using the example of *nang1* ‘sit’ (which involves an activity of ‘orienting into a seated position’ followed by a resultant state of ‘being in a seated position’):⁴

- (4) [\\\\ – – – –] ‘sit’
 →_t

The illustration shows that there are two ‘parts’ to the complex event. (See Newman and Yamaguchi, this volume, on these different ‘phases’ of ‘sitting’ in Japanese and English.) While these event components are both encoded in the ‘base’ semantics as illustrated, they may not both necessarily be ‘profiled’ (Langacker 1987: 183 ff.) in given contexts. Throughout this chapter, I use *dynamic* and *stative* to refer to readings of these posture verbs corresponding to the dynamic (marked as ‘\\\\’), and stative (marked as ‘–’) components, respectively, of the complex base illustrated in (4).

The following example allows either a dynamic or stative reading, since the aspectual operator *kamlang3* ‘progressive’ may combine with either activities or states:

- (5) man2 kamlang2 jùùn3
 3 PROG stand
 i. ‘He is in a standing posture.’
 ii. ‘He is in the process of coming to be in a standing posture.’

Certain grammatical contexts can resolve ambiguity by forcing one or another interpretation. For example, the postverbphrasal stative progressive particle *juu1* ‘be at’ forces a stative reading:

- (6) man2 nang1/jùùn3/nòòn2 juu1
 3 sit/stand/lie be.at
 ‘He is sitting/standing/lying.’ (i.e. ‘... is in seated/standing/lying posture’.)

By contrast, in combination with the preverbal retrospective particle *haa3.kò0*, a posture verb is interpreted as referring to an *event*, not a state (and thus refers to *inception* of the posture state, i.e. the transition from ‘\\\\’ to ‘–’ in (4)):

- (7) man2 haa3.kò0 nang1/jùùn3/nòòn2
 3 RETR sit/stand/lie
 ‘He just sat/stood/lay (down) (and is now in sitting/standing/lying posture).’ (NOT: ‘He was just in sitting/standing/lying posture.’)

In practice, if dynamic readings are intended, the posture verb will usually be accompanied by a verb expressing path (usually *long2* ‘descend’ or *khùn5* ‘ascend’), as in the following example:

- (8) laaw2 loot4 hùq1 – caj3-haaj4 dèè1 nòòj5-nùng1 lèka0 jaa1 –
 3 so INTJ angry PCL a.little then “forget.it”
 si0 ngoo2 maa2 nang1 long2 bòòn1 thong3 nan4
 IRR turn.back come sit descend place bag that
 ‘So he (went) “Humph!” — (He) was a bit angry, and so he (went) “Forget it”, and (he) was going to come back and sit down where that bag was.’ (41)

Dynamic readings can also arise due to the presence of preverbal directional/purposive *maa2/ma0* ‘come’. An expression ‘*ma0 V*’ means ‘came-and-V-ed’. *V* is interpreted as an event (not a state), thus profiling the dynamic component of the posture verb’s semantic structure. For example, with *nang1* ‘sit’ this results in a ‘sitting down’ *event*:

- (9) lang3-caak5 nan4 laan3 ka0 daj4 pum4 lèka0 qaw3
 after that nephew FOC.PCL come.to.have book then take
 ma0 nang1 – qaw3 ma0 nang1 long2 nii4
 come sit take come sit descend here
 ‘After that, the nephew had got his book and then brought (it) and sat
 — (he) brought (it) and sat down here.’ (48)

With a dynamic reading, *jùun3* ‘stand’ would normally be interpreted as ‘stand up’ (i.e. having been lying or sitting), but it is worth pointing out that this is an implicature and not an entailment. The next example shows that ‘coming to be in a standing position’ may also refer to a situation of ‘coming to a standstill’ (e.g. having been walking):

- (10) bò0 mii2 bòòn1 nang1 laaw2 ka0 leej2 ma0 jùun3
 NEG there.is place sit 3 FOC.PCL so come stand
 cap2 bòòn1 haaw2 lot1-mêê2 naa3
 grab/hold place handle/rail bus PCL
 ‘There was no place to sit, so she just came (along) and stood and held
 onto the bus handrail.’ (44)

Similarly, posture verbs with stative interpretations tend to appear with a locative phrase, headed by *juu1* ‘be at’ (note that this morpheme is the one that has a ‘stative progressive’ meaning elsewhere — cf. example (6), above):

- (11) nang1 juu1 theng2 lot0-mêê2
 sit be.at atop bus
 ‘(He) was sitting on the bus.’ (44)

3.1.2. *Valence properties*

The three verbs *nang1* ‘sit’, *jùun3* ‘stand’, and *nòòn2* ‘lie’ are ambitransitive, where ‘S equals A’ (Dixon 1991:286 ff.), not the dominant pattern among Lao verbs. The two simple frames — intransitive and transitive — are illustrated here using *nang1* ‘sit’:

- (12) man2 nang1
 3 sit
 ‘He sat/was sitting.’

- (13) man2 nang1 tang1
 3 sit chair
 ‘He sat/was sitting (on a) chair.’

I refer to the structure in (13) as ‘transitive’ primarily in order to differentiate it from an alternative means for expressing the ground participant, namely an ‘oblique’ construction in which the ground (e.g. a chair) is marked as oblique with the locative verb-preposition *juu1* ‘be at (some place)’:

- (14) man2 nang1 juu1 tang1
 3 sit be.at chair
 ‘He was sitting on (/at?) a chair.’

The same structure is used for expression of locative adjuncts generally:

- (15) man2 taaj3 juu1 talaat5
 3 die be.at market
 ‘He died at the market.’

Example (13) is ‘transitive’ only to a degree. In any language, primary transitive verbs (Andrews 1985: 68) are accessible to a given range of grammatical behaviors, while verbs of other classes, with different argument structures and logical/aspectual specifications, will be accessible to different subsets of this range (cf. Hopper and Thompson 1980). Accordingly, example (13) does not show the full range of grammatical behaviors associated with primary transitive verbs such as ‘smash’ or ‘kill’, but nonetheless does show some. For example, it may be paraphrased using a ‘disposal’ type multi-verb construction involving ‘take’ (see Enfield in press b: §3.4 for description of these constructions):⁵

- (16) man2 qaw3 tang1 ma0 nang1
 3 take chair come sit
 ‘He took the chair and sat (on it).’

The transitive pattern illustrated in (13) is restricted to expression of stereotypical situations. Example (13) works because a chair is a typical thing to sit on. Some associations of particular posture verbs and particular objects may be stereotypical yet may not show the same topological association as (13). Compare (13) (a case of ‘sitting *on*’) with the following example (a case of ‘sitting *at*’):

- (17) man2 nang1 toq2
 3 sit table
 ‘He was sitting (at the) table.’

Pragmatic consequences arise, with the introduction of a *frame* (Fillmore 1982), i.e. the context-specific importation of more information than is apparently

specified in the semantics. Thus, (17) describes someone sitting at a table in a way that people normally sit at tables — i.e. facing the table, with legs underneath the table surface, and with the table surface accessible for the activity the subject is engaged in (e.g. studying or eating). (Note that a reading ‘He was sitting on the table’ is also marginally possible, but would require contextual support.)

A covert grammatical distinction between (13) and (17) concerns accessibility to the ‘disposal’ construction illustrated in (16) — this permutation specifies that the ground object be actually sat upon (as in (13)), and does not allow the ‘showing stereotypical topological relation’ reading preferred in (17):

- (18) man2 qaw3 toq2 ma0 nang1
 3 take table come sit
 ‘He took the table and sat (on it).’ (NOT: ‘He took the table and sat (at it).’)

Another covert distinction between the two ‘transitive’ constructions (13) and (17) concerns expression of the ground participant by a pronominal, permissible once again only where the ground object is actually sat upon (as in (13)), not merely ‘showing stereotypical topological relation’ with the figure (as in (17)). Thus, in the following example, the relation between nang1 ‘sit’ and the first instance of man2 ‘it’ is one of ‘sitting on’, not ‘sitting at’:

- (19) khòj5 nang1 man2 pap2, lèw4 man2 tèk5
 1 sit 3 right.then pfv 3 break
 ‘Right when I sat (on it), it broke.’

If man2 ‘it’ in example (19) refers to a table, then the figure was sitting *on* the table. (English similarly allows *I sat on it* but not **I sat at it*.)

Now consider the ‘oblique’ counterpart of example (17):

- (20) man2 nang1 juu1 toq2
 3 sit be.at table
 ‘He was sitting at a/the table.’

Although this still entails that the subject was sitting at the location of some table, it may refer (unlike (17)) to a case in which someone was sitting on the ground *next* to the table, or on a chair facing away from the table — i.e. in a non-stereotypical relation to the table, or where there is no ‘logical’ connection between the table and the seated posture of the figure.

The transitive construction with posture verbs invokes enriched conceptual detail, drawing on what is commonly known by speakers about stereotypical associations of particular postures and particular objects. As a result, when a given posture and a given ground object do not have a stereotypical relation, the transitive construction is not used. Thus, nòd2 ‘lie’ may take sa2t5 ‘straw mat’, din3 ‘ground’ or tiang3 ‘bed’ as direct object (in the pattern of (17)), since these

are typical things on which one would lie (and sleep) — but *nòn2* ‘lie’ does not normally take direct object nominals like *ton4-maj4* ‘tree’ or *langkhaa2* ‘roof’, since those are not typical things on which to lie (or sleep). With such ground objects, the oblique-marking locative verb *juu1* is obligatory:

- (21) man2 *nòn2* *(*juu1*) *ton4-maj4/langkhaa2*
 3 lie (be.at) tree/roof
 ‘He is lying/sleeping in a tree/on the roof.’

This text example demonstrates the point:

- (22) *khòj5 hèn3 tèè1 khon2 taaj3 nòn2* *(*juu1*) *thaang2 saam3 sop2*
 1 see only person die lie be.at road three corpse
 ‘I only saw dead people lying on the road, three (of them).’ (6)

Finally, note that the transitive posture construction is not highly productive, and *juun3* ‘stand’ is apparently not accessible to it at all.

3.1.3. Associated posture construction

An important construction involving posture verbs is the ‘associated posture construction’, of the following form:

$V_{\text{POSTURE}} + V_{\text{ACTION}}$ ‘do ACTION while in POSTURE’

This is comparable to the English ‘V and V’ construction (e.g. *He sat (down) and read his book*, *He was sitting and reading his book*), or an adverbial construction of the form ‘V V-ing’ (with the posture verb in either position — e.g. *He sat reading his book*, *He read his book sitting (down)*).

Here are some examples, with the relevant verbs in boldface:

- (23) *kin3 lèka0 nang1 sangkêêt5 juu1 han5 lèèw4 khaw3 hêt1 nèèw2.daj3*
 eat PCL sit observe be.at there PFV 3 do how
 ‘(When I’d) eaten, (I) **sat** there **observing** what they did.’ (340)
- (24) *laaw2 ka0 paj3 jùùn3 lòd2-thaa5 lot1-mêê2 juu1 baat5.ni0*
 3 FOC.PCL go stand wait bus PCL PCL
 ‘So he went and **stood waiting** (for) the bus.’ (40)
- (25) *mè0-paa4 nan4 laaw2 ka0 nang1 khaaj3 saj5-kòòk5 juu1*
 aunty that 3 FOC.PCL sit sell sausages be.at
 ‘That aunty, she was **sitting selling** sausages.’ (38)
- (26) *nang1 lin5 – nang1 lom2 kan3 lin5 juu1 naj2 paa1*
 sit play/enjoy sit talk together play/enjoy be.at in forest
 ‘We’d **sit** and enjoy (ourselves) — **sit** and **talk**, enjoying ourselves in the forest.’ (1080)

V1–V2 sequences in which V1 is a posture verb may receive other interpretations in addition. First, if the posture verb is interpreted as *dynamic*, then these $V1_{\text{POSTURE}}+V2_{\text{ACTION}}$ strings are simply event sequences, analogous to *paj3 talaat5 maa2* [go market come] ‘(I’ve) been to the market (and) come (back)’ or resultatives like *tok2 taaj3* [fall die] ‘fall (and) die’. However, the vagueness/ambiguity between interpretations of these strings as [posture+action] versus [action] > [action] apparently needn’t always be definitively resolved — resolving the distinction appears to be a pragmatic process, i.e. not one encoded in the semantics of the expression. Consider the V1–V2 sequence *nang1 sit2* ‘sit (and) put a line in for fish’ in the following example:

- (27) long2 paj3 qaap5 nam4 ni0 thùù3 bê2 paj3 phòòm4 ni0
 descend go bathe water PCL carry hook go together PCL
 paj3 **nang1 sit2** qaw3 bùt2-diaw3 thòò1-nan4 lèq1
 go sit put.a.line.in.for.fish take moment-single only PCL
 saaw2 saam3-sip2 too3 khùn5 maa2
 twenty three-ten PCL ascend come
 ‘(When we’d) go down to bathe, and (we’d) take a hook-and-line along
 — (we’d) **sit and put a line in** and in just a moment we’d get twenty or
 thirty (fish) come up.’ (712)

The V1–V2 sequence *nang1 sit2* could be construed as a dynamic sequence of ‘sitting down’ and then ‘putting a line in’. However, due to the logical structure of *nang1* ‘sit’ — action followed by resultant state, as illustrated in (4) above — stative ‘seated posture’ naturally scopes over the subsequent action of ‘putting a line in’, since ‘being seated’ is entailed by ‘having sat’. We now consider this in more detail, with reference to the base semantics of these verbs.

Consider the difference between an ‘associated posture’ construction and a simple action sequence. A simple action sequence might be a resultative like *tok2 tèk5* ‘fall break’, where two events take place one after the other (with a causal or at least counterfactual conditional relationship understood). This may be illustrated as follows:

- (28) [W] tok2 ‘fall’
 [W] tèk5 ‘break’
 →_t

By contrast, some complex adverbial constructions express ‘overlap’ of aspects of a single event — i.e. conceived ‘features’ of an event which are not temporally sequential, but constitute qualitatively distinct aspects of the same single event. One example involves directional constructions with path verbs like *long2* ‘descend’, functioning in a manner comparable to English prepositions or verb particles (such as ‘down’):

- (29) [\\] ñaang1 'walk'
 [\\] long2 'descend'
 $\rightarrow_t$

Thus, *ñaang1 long2* 'walk down' describes a unitary event which has a 'walking' aspect and a 'descending' aspect, these two aspects being conceptually but neither physically nor temporally separable.

Now consider what happens when a path verb like *long2* 'descend' (with no stative reading available) combines with a posture verb like *nang1* 'sit'. As illustrated in (4) above, the base semantic structure of *nang1* 'sit' includes a dynamic and a stative component. In the case of *nang1 long2* 'sit down', the *dynamic* interpretation of *nang1* 'sit' is made (since it is the dynamic component of the base semantics which is profiled and combined — by 'overlap' — with the dynamic 'descend' event):

- (30) [\\ - - - -] nang1 'sit'
 [\\] long2 'descend'
 $\rightarrow_t$

Here, the 'coming to be in a sitting position' and the 'descending' are qualitatively distinct yet inseparable features of a single event, which cease simultaneously. The entailed resultant state is 'being in a sitting position'. Now, if we combine *nang1* 'sit' with an action like *qaan1* 'read', two possible analyses of the V1–V2 sequence emerge. First, V1–V2 predicates a sequence of two events — 'sitting down' followed by 'reading'. This is analysable in the same way as (28), but in contrast to (28), V1 entails a specific subsequent state — namely 'being seated' — which then happens to overlap with the 'reading' activity (occurring subsequent to the 'sitting event):

- (31) [\\ - - - -] nang1 'sit'
 [\\] qaan1 'read'
 $\rightarrow_t$

Alternatively, *nang1 qaan1* [sit read] could be construed as an 'overlap' of state and event — 'being in a sitting position' and 'reading' at the same time — analysable in the same way as (29):

- (32) [\\ - - - -] nang1 'sit'
 [\\] qaan1 'read'
 $\rightarrow_t$

These choices in interpretation correspond to alternative 'profilings' of complex base semantics. How to determine if one of these is a better analysis? In some cases, grammatical context virtually forces a certain interpretation (as in (30); cf.

also (6) and (7), above), while in other cases, no distinction is necessary or perhaps even possible (cf. (31) and (32), which are effectively identical).⁶

3.1.4. *On the ethnosyntax of associated posture constructions*

I have elsewhere described effects of combining certain posture verbs with certain activity verbs, where alternative construals apparently depend on whether or not the given activity is culturally typical in the given posture (Enfield 2002b). There are cultural practices in Lao-speaking culture that specify or are normally associated with, or defined as involving, particular basic postures (for example certain practices of worship, ways of playing different musical instruments). Cultural expectations surrounding typical posture-plus-activity combinations can directly determine interpretations of particular combinations of activity and posture verbs. For example, when one visits the temple to worship on holy days, one of the things one may do as part of the official proceedings is *fang2-thêêt4* — literally, ‘listen to a sermon’. This is done sitting on the floor of a temple building. The following example naturally describes participation in the worship practice known as *fang2-thêêt4*:

- (33) khaw3 fang2 thêêt4
 3 listen sermon
 ‘They listened to a sermon.’

This *could* simply predicate an event of someone ‘listening to a sermon’, regardless of any aspects of context. They *could* be in any posture, washing the dishes while the sermon is on the radio, and so on. With a simple compositional reading, the meaning is the sum of the parts and nothing more, and the average English speaker wouldn’t take the translation of (33) to convey much more than this. But example (33) *does* convey much more than this. On the *default* interpretation, the sermon referred to in (33) is not just any old sermon, but a live sermon chanted in formulaic Pali with a Lao accent, with a characteristic rhythm and melody. Neither the listening nor the chanting are done in any old place, but in the same place — the temple — and on particular times of religiously significant days. Many people are involved. Furthermore, it is understood that everyone involved is *seated*. Accordingly, preverbal addition of *nang1* ‘sit’ to (33), specifying the one posture which is compatible with the overall frame, does not clash with this enriched ‘frame’ interpretation.

However, if a posture verb other than *nang1* ‘sit’ is used in an associated-posture construction with *fang2 thêêt4* ‘listen to a sermon’, the stereotypical complex ‘listening-to-a-sermon’ scenario is blocked, and the listener knows that the speaker is not referring to the usual situation. Then, only the simple compositional reading (i.e. the computed output of ‘posture’ plus ‘activity’, with no enrichment with culture-specific information) is then available. Consider these examples:

- (34) jùùn3 fang2 thêêt4
stand listen sermon
'(They) stood listening to a sermon.'
- (35) nòòn2 fang2 thêêt4
lie listen sermon
'(They) lay down listening to a sermon.'

None of the detail described above is imported in these two examples, since the posture associated with the culturally defined complex scenario is *nang1* 'sit'. To be in either of the other postures is not to be participating in the complex worship activity of 'listening to a sermon'. Examples (34) and (35) still refer to people literally 'listening to a sermon', but that's all. The idea of 'being a participant in a complex and conventionalized worship activity' is ruled out by contradiction of the one posture *prescribed* by the stereotype (i.e. *nang1* 'sit'). Examples (34) and (35) may refer, for example, to someone who is hanging around outside the temple (while standing or lying down) and idly listening to a sermon which happens to be audible.⁷

4. Closing remark

As other chapters in this volume show, the words for 'sit', 'stand', and 'lie' in a language can be prime targets for recruitment into grammatical functions. In Lao, however, it is notable that while many verbs (such as 'arrive', 'acquire', 'finish', 'know', 'want', 'come', 'go', 'give', 'keep', and 'take') function as markers of aspect, modality, and other grammatical distinctions, the words for 'sit', 'stand', and 'lie' show none of these 'extended' functions. They remain, essentially, ordinary verbs. As should be clear, however, this makes them no less fascinating or worthy of research. To the contrary, focussed investigation of lexical semantics and pragmatics is a fundamental (yet neglected) aspect of research in linguistic typology.

Abbreviations used in glosses

1 = 1st person; 2 = 2nd person; 3 = 3rd person; ACHV = achievement; FOC.PCL = focus particle; INTJ = interjection; IRR = irrealis; NEG = negation; PCL = discourse particle; PFV = perfective; PROG = progressive; RETR = retrospective.

Notes

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1. The texts were collected in Vientiane in 1996 and 1997 (Enfield 2000). Figures in brackets after examples are references to section numbers in the corpus. Unmarked examples are constructed/elicited and verified with native speakers. Lao has no standard transcription — in the system used here, syllable-final numerals refer to tones 1 [32], 2 [35], 3 [14], 4 [52], and 5 [31]. The numeral ‘0’ indicates unstressed syllable. Non-IPA symbols are *ù* (high back unrounded vowel), *è* (low front vowel), *ò* (low back vowel), *a* (=IPA *a*), *ñ* (palatal nasal), *ng* (velar nasal), *q* (glottal stop). Double vowel symbols indicate that the vowel is long.

2. I use scare quotes for the words ‘extend’ and ‘extension’ (in the sense that one meaning of a word can be thought of as having developed out of another meaning of the same word), since it is unclear what precisely is meant by the routine use of the term in the literature on historical and cognitive semantics. Is semantic ‘extension’ a pragmatic, real-time, active process? Is it a kind of relationship among entities within a synchronic system? Or is it a process that occurs over time? If so, does it take place on the ontogenetic dimension (within the minds of individuals), or on the diachronic dimension (within the linguistic system)? Or are there yet further ways of understanding the notion of ‘semantic extension’? See Enfield (in press a: 24, 2002a) for discussion.

3. White (1992:23) discusses the same issue with respect to the use of terms like *anger* in cross-linguistic research on emotion.

4. Let ‘[]’ refer to conceived event/state boundaries, ‘\ \ \ \’ refer to something happening, and ‘— — —’ refer to a state, or something ‘being the case’.

5. Note that this example does not entail that the speaker physically ‘takes’, or does anything else to (apart from sit on), the chair.

6. The situation is paralleled by the behavior of ‘wearing’ verbs such as *nung1* ‘put on/wear an article of clothing’, which have the same ‘accomplishment’ aspectual structure as the posture verbs — either meaning ‘put *x* on’, or ‘be in the state resulting from having put *x* on’ (i.e. ‘be wearing *x*’). Thus:

- (i) laaw2 nung1 ka=poong3 khap2 lot1-ñaj1
 3 put.on/wear dress drive truck
 ‘S/he’s wearing a dress (and) driving a truck.’

7. Some would put the ‘frame’-related details described above into the pragmatics (i.e. have them merely generated by implicature), not the semantics. Others would say that examples like (33) are polysemous, with basic compositional meanings, as well as richer, idiomatic meanings. It is unclear how substantial the distinction between these two stances is.

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CHAPTER 3

Action and state interpretations of ‘sit’ in Japanese and English

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1. Introduction

Verbs relating to human postures such as sitting, standing, lying etc. present interesting complexities in terms of the range of meanings they may be associated with. Even the lexicalizations of such concepts present quite a diversity when it comes to identifying which postures receive expression as separate words or morphemes in languages. Squatting, sitting cross-legged, sitting with open legs, sitting with legs stretched out, kneeling, leaning, lying on one’s stomach, and lying on one’s back are just some of the human postures which may be encoded as linguistic units, either single words or monomorphemes. Apart from this lexical diversity in the literal expression of postures, there is also an abundance of semantic extensions and grammaticalizations found with such verbs, at least with the more commonly used posture verbs relating to sitting, standing, and lying. While all these aspects of posture verbs, and the constructions they occur in, merit attention, in what follows we focus on one particular conceptual distinction relating to such verbs: the distinction between the action of moving into a posture and the maintenance of the posture state.

In some languages, the differentiation of the action and state phases of sitting, standing, and lying is relatively sharp, involving distinct lexical or morphological means. For example, German contrasts an intransitive *sitzen* ‘sit’ (state) and a reflexive *sich (hin)setzen* ‘sit down’ (action). Tsova-Tush employs different case marking on the subject to indicate the two phases associated with the verb *ču dipšar* ‘lie, lie down’: ergative marking for the action phase and absolutive case marking for the state (Holisky 1987: 126). Our interest here lies in identifying how such actions and their associated states are encoded in Japanese and English, using the ‘sit’ verb for purposes of illustration (Japanese *suwaru*). Talmy (1985: 85–90) has already discussed some key differences between Japanese and English posture verbs and their constructions, noting in particular how the basic meaning of the Japanese

posture verbs is the ‘enter into the sitting/standing/lying state’ meaning. We concur with Talmy in this judgement, but we explore in more detail the behavior of these verbs and the aspectual category which brings about the shift to the state meaning in Japanese. Japanese and English both utilize their respective aspectual categories to convey the distinction between action and state phases of ‘sit’. We discuss not only some of the traditionally recognized aspectual markers of these languages (*be...ing* etc.), but as well we consider the role of “aspectual” adverbial phrases (e.g. *for a while*) in the construction of different interpretations of a ‘sit’ verb.

In presenting our account of ‘sit’ in the two languages we attempt, where possible, to motivate the linguistic facts by reference to the everyday reality of the experience of sitting. It is this part of our discussion — the experiential motivation underlying the observed linguistic facts — which, we believe, offers a novel view of the relevant data. Aspectual categories, in terms of their form and function, have been well researched, in general terms, in both languages, but the role of experiential reality in motivating particular constraints operating with particular verbs has received little attention.

2. Human habits

We acknowledge the pervasive role of experiential reality in shaping language. Our approach may therefore be labeled “experientialist” as advocated in works such as Lakoff (1987:260–8), Lakoff and Johnson (1980:56–60; 1999:45–60), Lakoff and Turner (1989:112–14) and Sweetser (1990:28–32). Lakoff (1987:266) describes the “experientialist” approach as involving the attempt “to characterize meaning in terms of the nature and experience of the organisms doing the thinking”. Consistent with this approach, we recognize the naturalness of certain sequences of actions and states relating to human postures. “Naturalness” here is taken to mean an event or state belonging to everyday, recurring, human experiences typical of healthy persons going about their lives. There are highly natural sequences associated with sitting, standing, and lying postures which need to be acknowledged. For the purposes of illustration, we have chosen to focus mainly on the sitting event, though comparable observations can be made for the other postures. The state of sitting has some typical properties:

- (1) a. We enter the state of sitting through a conscious, controlled act on our part;
- b. The act of sitting is done with the express intention of maintaining a state of sitting;
- c. The act of sitting is relatively brief;
- d. The state of sitting is relatively long, compared with the act of sitting.

(1) summarizes key points relating to the *frame* or *idealized cognitive model* (cf. Lakoff 1987:68–76) of human sitting. (a) draws attention to the controlled, instigated nature of the sitting act. In this, the act of entering the sitting state is quite different from entering states such as being sick, being tall, being old etc. Also, it is worth stating the obvious here: there is a particular way in which humans enter into the sitting state, say, on a chair. We position ourselves adjacent to the chair and lower the upper torso in such a way that the buttocks are in contact with a flat surface. Admittedly, there are some variations which are possible, but the variations are within limits. The point is that we do not enter the sitting states by anything like teleporting; nor do we typically enter sitting states by crawling along the floor and pulling ourselves up into a chair. The latter is possible but not typical of how we live as normal human beings. (b) refers to the close relationship between the act of sitting and the state: the act of sitting is closely integrated with the subsequent state of sitting. We go through the act of sitting with the express purpose of being in the seated position. (c) and (d) describe typical human behavior, rather than possible behavior. The act of sitting, from the time we are next to a chair to the time we are in a seated position takes only a second or two. When we are in a sitting position, we typically maintain that position for some time. Imagine some of the obvious reasons for sitting down and the lengths of time involved: morning coffee at work (10–20 minutes?), listening to a lecture (an hour?), watching a movie (1–2 hours?), being in a plane travelling from Los Angeles to London (14 hours?). We are not in the habit of taking one or two hours to go through the act of sitting down. Even if we take 10 seconds to carry out the act of sitting, there is something physically or mentally abnormal about our behavior. And we are not in the habit of momentarily being seated and then standing up. We *can*, if we want to, behave in these unusual ways, but here I am describing the reality of our normal lives, rather than the extremes of abnormality. The structures of language, in so far as they embody experiential reality, embody normal experiential reality. Comparable observations may be made about standing and lying.

These observations, simple as they are, have implications for the way in which we encode and decode posture expressions in languages. The internal complexity inherent in the frame of sitting described above is such that the whole sitting event is unlikely to fall neatly into any single one of the aspectual verb classes traditionally recognized in linguistics. Only when some more delimited sub-part of the whole frame is isolated is one able to categorize that part in the familiar terms of activity, achievement, state etc. Despite this internal complexity, the whole frame represents a natural, integrated gestalt in which the parts combine to form a familiar chunk of human experience. From this point of view, the whole frame represents a coherent, unified assembly of experiences.

Languages can reflect both these perspectives on the sitting experience by employing devices to distinguish, or *profile* (cf. Langacker 1991:5–7), the sub-parts of the frame as well as allowing the whole frame to be taken as the relevant profiled portion.

A common pattern in languages is to draw upon identical or similar lexical forms to refer to the action and state sub-parts of the frame, with additional morphemes or clausal elements serving to distinguish the two phases. This is the pattern found in the languages discussed below. One can, of course, have lexically quite distinct ways of referring to the action and state sub-parts, as with German *sitzen* and *sich (hin)setzen*.¹

3. Japanese

The main Japanese posture verbs are *suwaru* ‘sit down’, *tatu* ‘stand up’, and *yoko ni naru* ‘lie down’. Although we focus here on *suwaru*, most of our observations would also apply to *tatu* and *yoko ni naru*. An existing aspectual system of Japanese may be brought into service to differentiate action and state meanings of the sitting frame. However, the use of the aspectual system is not the only device relevant to such differentiation. Co-occurring clausal elements, in particular time adverbials, will similarly induce a profile shift.

3.1. The *te iru* construction

The verb *suwaru* ‘sit down’ in Japanese refers basically to the action of sitting, rather than the state. As such, the verb bears some similarity with intransitive inchoative verbs in Japanese such as *shimaru* ‘close, shut’. With these verbs, the change-of-state-meaning is associated with the use of the verb in a simple past tense, with the implication that the new state continues for some unspecified time. The stative meaning, on the other hand, is conveyed through the use of a construction with *te iru*, consisting of a suffix *te* and the verb *i-ru* ‘be-PRES’. This construction, which has been the subject of extensive study in Japanese linguistics, has an intriguing range of meanings associated with it. Soga (1983:116–98), for example, distinguishes progressive, resultative, experiential, perfect progressive, and perfect resultative as the aspectual functions of *te iru*. Of all these, progressive and resultative appear to be the most prominent.² When used with *suwaru*, *te iru* brings about a semantic shift to the sitting state resulting from the sitting action, i.e. the resultative aspect. In this respect, *suwaru* behaves just like a number of verbs in Japanese which one could broadly label “inchoative”. Compare the simple past vs. *te iru* forms of the inchoative verb *shimaru* ‘close, shut’ and *suwaru* ‘sit down’ in (2) and (3).

- (2) a. Mado ga shimat-ta.
 window NOM close-PAST
 'The window closed.' (CHANGE OF STATE with implied continuing new STATE)
- b. Mado ga shimat-te i-ru.
 window NOM close-*te* be-PRES
 'The window is in a closed position.' (STATE)
- (3) a. Toshi ga suwat-ta.
 Toshi NOM sit-PAST
 'Toshi sat down.' (ACTION, with implied continuing STATE)
- b. Toshi ga suwat-te i-ru.
 Toshi NOM sit-*te* be-PRES
 'Toshi is sitting.' (STATE)

The sitting frame inclines us to assume the maintenance of the state of sitting even when it is the action of sitting which is profiled, as in (3a). This is consistent with the normal expectations we have of the sitting event. In the case of the action of sitting, there is a conscious intention on the part of the person performing the action to remain seated (normally). The reality of the common association of action and state phases of sitting might lead one to expect that either phase equally implies the other. That is, we might expect that the state weakly implies the entry into it, just as the action weakly implies the continuation of the resulting state. However, we find an asymmetry here. The action of sitting is a brief, goal-oriented action leading directly and immediately to the state and highlighting the action inevitably leads to an expectation of the state. The state of sitting, on the other hand, is a relatively long phase and, because of that, the association with the act which brings it about is weakened to the point where it is outside the scope of the state meaning. In other words, the action of sitting implies the resulting state more strongly than the state implies the inceptive action. Similar observations may be made about the other posture verbs and change of location verbs like *hairu* 'enter', *toku* 'arrive', *kuru* 'come', and *iku* 'go'. With all these verbs, there is an action which strongly implies a subsequent maintained state. As such they can be dealt with in the grammar in the same way as inchoative verbs generally, relying upon the *te iru* construction to shift the profile to the resulting state. There is a parallel, then, between the 'ACTION, with implied continuing STATE' sense of *suwaru* and the sense of 'CHANGE OF STATE with implied continuing new STATE' with other inchoative verbs such as *shimaru*.

As mentioned above, *te iru* can have a progressive meaning, referring to an activity in progress, as well as the resultative meaning. And there are verbs in Japanese which do allow either the action phase or the resulting state phase to be profiled in a *te iru* construction, depending upon context and construal. This is so,

for example, with *kiru* which corresponds to either ‘put on (clothes)’ (the progressive interpretation) or ‘to wear’ (the resultative interpretation). Compare (4a) and (4b), adapted from Takahashi (1976):

- (4) a. Ima, fuku o ki-te i-ru kara, tyotto mat-te kure.
 now clothes ACC put on-*te* be-PRES as a bit wait-*te* please
 ‘Wait, as I’m putting clothes on.’ (ACTION)
 b. Takusan no fuku o ki-te i-ru node,
 many GEN clothes ACC wear-*te* be-PRES as
 atuku-*te* tamarana-i.
 hot-*te* intolerable-PRES
 ‘As I’m wearing a lot of clothes, I feel too hot.’ (STATE)

Another verb which can have action and state meanings in a *te iru* construction is *kiru* ‘cut’ (a different verb, with different verbal morphology, to *kiru* ‘wear’). The *te iru* form of this verb is interpreted as the progressive of an action and the resulting state of a cutting action in:

- (5) a. Kanojo wa daikon o kit-te i-ru.
 she TOPIC Chinese radish ACC cut-*te* be-PRES
 ‘She is cutting a Chinese radish.’ (action) (Takahashi 1976: 126, ex. 67)
 b. Kanojo wa otoko no you ni kami o
 she TOPIC man GEN look ni hair ACC
 mijikaku kit-te i-ru.
 short.ADV cut-*te* be-PRES
 ‘Now she has a short hair style.’ / ‘She had her hair cut short.’
 (Takahashi 1976: 126, ex. 69)

In light of such examples, it is all the more interesting that the *te iru* construction does not bring about an action meaning of ‘be in the process of sitting down’ with *suwaru*. An approximation to this meaning would be a *tokoro da* construction as in (6):

- (6) Watashi ga heya ni hait-ta toki
 I NOM room DIR enter-PAST when
 kare wa suwar-u tokoro dat-ta.
 he TOP sit-PRES *tokoro* COPULA-PAST
 ‘When I entered the room, he was just about to sit down.’

The nature of the sitting action, compared with the cutting action (at least with vegetables, as in the example above) and the dressing action, is presumably relevant here. As explained above, the sitting down action is relatively brief and seems insubstantial compared with the action of getting dressed or the procedure

of cutting up vegetables. Sitting down is merely the momentary inception of the state and it is the state which is significant. Correlating with this experiential reality is the unavailability of a progressive interpretation of a *te iru* form of *suwaru* ‘sit down’ but the availability of such an interpretation with the other two verbs. In Chafe’s (1980) terms, *suwaru* is a “consequential” verb. The behavior of *noboru* ‘rise’ with respect to *te iru* shows a similar phenomenon. Only when the rising extends over some appreciable length of time (e.g. the rising of smoke, the rising of the sun), where there is an ongoing event of some interest and significance, is a progressive interpretation of *te iru* possible. Otherwise, we find only the resultative interpretation.

We see, then, that the differentiation of the action and state phases of the sitting event is accommodated in Japanese by construing the two phases in terms of a change of state (the action of sitting down) and a resulting state (the maintenance of the sitting position). An established aspectual system utilizing a *te iru* formation, gives overt expression to this distinction.

3.2. *Suwaru* with other aspectualizers

We normally reserve the term “aspect” in Japanese for the verbal marking found with the verb, creating distinctions relating to duration, completion etc. However, there are a number of other clausal elements which can create durative or completed meanings of verbs. Adverbial phrases such as *for a while*, *in 5 minutes* etc. have this effect, and so do the auxiliary uses of verbs like *continue*, *cease* etc. We may call these parts of the clause “aspectualizers”, since their effects on the interpretation are comparable to that of verbal aspect markers.

Time adverbials like *for a while*, *in a while* have played a prominent role in discussion of aspectual classes, as in Van Valin and LaPolla (1997:91–102). In particular, the distinction between “achievement”(=instantaneous) and “accomplishment” (non-instantaneous) aspectual classes is often made on the basis of co-occurrence with time adverbials like these. Instantaneous verbs like *pop*, *collapse*, and *shatter*, for example, can occur with *in a second*, *in a split second* etc, but not normally with *for a while*, *for a minute* etc. Similarly, in Japanese an instantaneous verb like *shimaru* ‘close, shut’ can occur with an ‘in’ time adverbial (the postposition *de*), but it does not occur with the ‘for’ time adverbial (in Japanese, the bare time phrase). This verb contrasts with a typical non-instantaneous inchoative such as *moeru* ‘burn’ which does allow the ‘for’ time adverbial:

- (7) a. Mado ga shimat-ta.
 window NOM close-PAST
 ‘The window closed.’

- b. Mado ga ippunkan de shimat-ta.
window NOM one.minute in close-PAST
'The window closed within a minute.'
- c. *Mado ga ippunkan shimat-ta.
window NOM one.minute close-PAST
'The window closed for a minute.' or
'The window took a minute to close.' or
'The window was in a closed position for a minute.' etc.
- (8) a. Ie ga moe-ta.
house NOM burned
'The house burned.'
- b. Ie ga gofunkan de moe-ta.
house NOM five.minutes in burn-PAST
'The house burned within five minutes.'
- c. Ie ga gofunkan moe-ta.
house NOM five.minutes burn-PAST
'The house burned for five minutes.'

Other instantaneous inchoatives showing the same pattern as *shimaru* 'close, shut' include the (intransitive) verbs: *otiru* 'drop', *hieru* 'cool', *tokeru* 'melt', *waku* 'come to the boil', *kireru* 'become cut, become broken, snap', *kowareru* 'break', and *okiru* 'rise, get up (e.g. a person)'. Non-instantaneous inchoatives which pattern like *moeru* include: *shizumu* 'sink, submerge', *noboru* 'rise (e.g. smoke)', *naru* 'sound, ring (e.g. a bell)', and *nagareru* 'be floated, to come to float on water (e.g. a bridge in a flood)'. When we consider *suwaru* 'sit down' with respect to the instantaneous vs. non-instantaneous distinction, we find that it can co-occur with 'for' time phrases and hence patterns like *moeru*:

- (9) Toshi ga ippunkan suwat-ta.
Toshi NOM one.minute sit-PAST
'Toshi sat for one minute.'

The possibility of co-occurrence with a durative time adverbial like 'for one minute' makes *suwaru* appear more like other non-instantaneous inchoatives. But there is a significant difference: there are different phases of the change of state which are understood as occupying a minute of time. With *suwaru* it is the final phase of the sitting event, the seated position, which is conceived of as lasting a minute/hour etc., whereas with *moeru* it is the intermediate phase of the burning which lasts the minute/hour etc. Similar remarks apply to *yoko ni naru* 'lie down', where the 'for' time adverbial extends the duration of the reclining position. Interestingly, *tatu* 'stand up' does not easily allow the 'for' time adverbial:

- (10) ?Yuki ga ippunkan tat-ta.
 Yuki NOM one.minute stand-PAST
 ‘Yuki stood for one minute.’

Standing is not something which is normally done for any period of time — we usually stand in order to proceed somewhere. This may be a relevant factor in the awkwardness of (10).

The inchoative *suwaru*, therefore, does not fall easily into traditional categories of verb classes. Like the instantaneous inchoatives, its change of state is not naturally construed as prolongable. Like the non-instantaneous inchoatives, however, there is a prolongable phase, but with *suwaru* it is the final state which allows this, not the change of state.³

4. English

4.1. The *V-ing* construction

English also exploits the aspectual system to help make the action/state distinction explicit, as well as making use of a verb particle construction *sit down*. In this section we will focus mainly on the effect of *V-ing* on *sit* and postpone consideration of *sit down* until the following section. The *V-ing* progressive aspect of English has been described by many linguists, but we follow here the discussion in Langacker (1991:91–7).⁴ In this approach to the English progressive, the distinction between perfective and imperfective verbs is significant. With perfectives, the progressive imposes a temporally extended view of an event, taking some internal part of the event and construing it as extended through time. Although the component parts of events described by perfective verbs are not strictly homogenous, one conceptualizes them as homogenous on the basis of some commonality. A “canonical” perfective like *jump* is construed as one homogenous event and *be jumping* then conceptualizes that event as ongoing. With “canonical” imperfectives like *resemble*, on the other hand, there is an inherent indefinite temporal extension which is part of the meaning of the verb. Normally, there is no *V-ing* progressive form with such a verb, consistent with the fact that the temporal extension introduced by *V-ing* is already present in the meaning of the verb base. In between the prototypical perfective and imperfective verb bases are verbs like *sleep*, *wear* (*a sweater*), *walk*, *swim* etc. Langacker (1991:93) describes these verbs as internally homogenous (hence like the typical imperfective) but construed as bounded (hence like the typical perfective). On account of being bounded in their duration, they can occur with the *V-ing* progressive as do other perfectives.

Since the sitting event has a change of state component as well as an ensuing state component, one might expect *sit* to be analyzable as both a perfective verb (in its action sense) and a bounded imperfective verb (in its state sense). And, indeed, action and state interpretations of a clause such as *she sat on the chair* are possible. This sentence could be uttered as an explanation of either what the person did, i.e. the action, or the state she was in. Such a sentence could be elaborated in either of the ways indicated in (11).

- (11) a. She quickly went and sat on the chair when she saw that it became vacant.
- b. She sat on the chair while the guest of honour gave a short speech.

Here, the instantaneous adverb *quickly* and the durative *while* clause impose alternative interpretations of the main clause as either instantaneous or prolonged (but bounded in time), establishing that *sit*, or at least its simple past tense form *sat*, is compatible with either meaning. (As already observed, the state meaning is weakly implied whenever the action meaning is referred to and that is also the case in the (a) sentence above.) *Sit*, in the simple present tense in the meaning of habitual occurrence, is also compatible with either interpretation:

- (12) Kim likes to impress her boss, so . . .
- a. Kim always goes and quickly sits at her desk when she sees the boss coming.
- b. Kim always sits at her desk on the days when the boss is in.

It is clear, then, that *sit*, in either the simple present or the simple past, is open to either the perfective (action) or bounded imperfective (state) interpretation, depending upon context of utterance or co-occurring indicators of the duration of the event/state within the clause.

Since the progressive can occur with either perfective verbs (*jump*) or bounded imperfectives (*wear*), as discussed above, we might expect that *be sitting* is equally open to either of these interpretations. However, *be sitting* does not lend itself equally to either the action or state interpretation. It most naturally refers to the state component of the sitting frame, construed as extended through some limited time frame, as in (13a,b).⁵ It is far less natural to take the progressive form *be sitting* to refer to the extension through time of the action subpart of the sitting frame.⁶ Even in the (b) sentence, where spotting would be compatible with a brief action, an action interpretation of *was sitting* is difficult.

- (13) a. Kim was sitting on the park bench, holding a book.
- b. Kim was sitting on the park bench when a policeman spotted her.
- c. ?Kim was quickly sitting on the park bench when a policeman spotted her.

An adverb like *quickly*, suggesting a brief action, would promote an action interpretation, as perhaps in (13c), but the resulting sentence is awkward at best; a verb particle construction *was quickly sitting down* is more natural here than *was quickly sitting*.

In order to gain some idea of the prevalence of the action and state uses of *be sitting* (without *down*) in ordinary discourse, we turned to the Cobuild Bank of English "brspok" subcorpus, consisting of approximately 20.2 million words of transcribed informal spoken British English. We selected the first 50 instances of *be sitting on* (in various tenses) in which the line of the concordance contained the subject of *be sitting* as well as the prepositional phrase, in order to have a clearer idea of the intended meaning. These 50 instances are shown in the Appendix. Every instance readily allows a state interpretation and some only allow such an interpretation, e.g. *I don't want to be sitting on thirty-five, you're both sitting on equities, her main position in life is sitting on top of the garage roof*. An action interpretation is a possible, additional reading in some cases where there is little elaboration of the scene, e.g. *she's sitting on the seat, is he sitting on your lap now, he was sitting on the nest*. In no case is there any co-occurrence with an instantaneous time adverb like *quickly* to force an action interpretation. The conclusion one is led to is that the *be sitting* construction is much more commonly associated with the state interpretation than the action. Similar considerations apply as in the case of Japanese. It is only the state phase which is naturally construed as ongoing, it is the purpose of the momentary action, it is the phase of sitting in which we carry out other activities etc. The action of sitting, on the other hand, is relatively inconsequential in terms of its duration and in terms of what can happen during that phase.

4.2. The verb-particle construction

To some extent, the action/state differentiation with English *sit* is achieved through the presence or absence of a directional particle, *up* or *down*, which suggests motion and hence action. Indeed, bilingual dictionaries, as well as glossing of morphemes in linguistics publications, often make use of these particles as a conventionalized way of indicating the difference between action and state, distinguishing 'sit down' versus 'be sitting' as the two glosses. Certainly, in the context of bilingual dictionaries where this contrast is made, a reader will be inclined to interpret a contrast of 'sit' versus 'sit down' in terms of state versus action. The reason for this profile shift lies in the semantics of the particles *up* and *down*, though we will just be concerned here with *down*.

The most natural use of *down* as a particle (as opposed, say, to its use as a preposition) is to highlight the endpoint of a movement of some entity, as illustrated by the use of *down* in (14):

- (14) a. The plane went down in flames.
b. Kim came down to see us.
c. Kim bent down to pick the flower.
d. Kim knelt down to pray.

In these examples, it is not *down* by itself which introduces the idea of motion.⁷ The motion which is involved in all these examples is encoded through the verbs *went*, *came*, *bent*, and *knelt*. *Down* highlights the movement of an entity into a lower spatial region and, as such, is easily integrated semantically with verbs of motion, as in these examples. As a particle or adverb, *down* is less natural as an indicator of pure location, as opposed to movement to a location. When a motion verb is involved, an adverb *down* invariably indicates motion to a lower position, rather than motion in the lower position. A sentence such as *Kim is crawling down* is only interpretable as “Kim is crawling down a tunnel, down a cave etc.” with motion towards the end of a tunnel, cave etc. It can not be interpreted as “Kim is crawling around, down at the end of the tunnel, cave etc”.⁸ Admittedly, we have uses such as in (15).

- (15) a. Kim is feeling down at the moment.
b. The computer is down.
c. The market is down.
d. The boxer is down!

In these sentences, a location is being referred to, either concretely or abstractly. Even here, though, the idea of motion is relevant as part of the larger frame, with some implied downward movement (spatial or on some more abstract scale) assumed to precede the state of affairs being described. The boxer in the (d) sentence, for example, is on the mat or ground as an immediate result of having been knocked down, not because he or she habitually lives on the ground.

Thus, *down* — and similar points can be made concerning *up* — is mainly associated with meaning of a spatial region understood as the endpoint of some motion, rather than simply specifying a spatial region. These observations about *down* are relevant to appreciating its use in the verb–particle construction *sit down*. *Down* does not “create” the action sense with *sit* — we have already seen that *sit* by itself is capable of carrying that meaning. Rather, the use of *down* with *sit* will favour the action interpretation since it is defined with respect to a base in which motion is presumed.

4.3. *Sit* with other aspectualizers

As in Japanese, so too in English, the occurrence of time adverbs in the same clause as *sit* will influence the interpretation of the verb. Adverbs like *quickly* or

slowly force an interpretation of *sit* as an action, rather than as a state. On the other hand, adverbial phrases such as *for a short while* or *for a long while* require a state interpretation of *sit*. This is illustrated in (16).

- (16) a. Kim quickly sat on the chair when she saw it was free.
- b. Kim sat on the chair for a short while, giving her legs a rest.

It is possible to have a drawn-out process of seating oneself, say, in the case of an invalid who requires assistance. In such a case, we might say *the person takes a long time to sit down*, but we would not say *the person sat (down) for a long time*, meaning the process of sitting down took a long time.

5. Conclusion

In both Japanese and English, the existing verbal structures of the language can be enlisted to help differentiate the action and state phases of the sitting frame. In Japanese, the action is encoded as *suwaru* which functions like an inchoative verb; the *te iru* aspectual marker can then be employed, as with other inchoative verbs, to bring about the change of profile to the ensuing state. In English, the verbal aspectual system of the language, in particular the *V-ing* construction, also functions to shift the focus of the *sit* meaning to the state phase. In addition, English exploits an extensive verb–particle construction type by drawing upon the particle *down*, with its suggestion of motion towards a goal, to indicate an action sense of *sit down*. These devices can all be called “grammatical” in so far as they rely upon recognized form–meaning pairings of suffixes or particles tightly integrated with verb bases.

In addition to the grammatical devices available in these languages, there are other ways in which the action and state meanings can be conveyed, namely through the effects of co-occurring clausal elements such as durative adverbial phrases. Phrases such as *for a while*, *for a minute* etc. can also impose a stative profile on the verbal semantics, comparable to that found with grammatical devices. They do this by locating the ‘sit’ event in a particular time frame, leaving it to the listener or reader to find a way to naturally extend the ‘sit’ event to occupy that time frame. This inference is ultimately motivated by the experiential realities of the event and in the case of the posture verbs the reality is that the state of sitting is the naturally prolongable phase.

Appendix

BE *sitting on* in the first 50 occurrences with subject and prepositional phrase included in the line (based on “brspok” subcorpus of Cobuild Bank of English)

as well so that when people were sitting on the floor they sort of looked
 <F0X> It was brilliant I was he was sitting on here and Karma was just sort of
 <M0X> <ZGY> jacket on and I was sitting on here. <F0X> You've got your
 <M0X> Then they get on and they're sitting on separate sides so <ZGY> <F0X> I
 the adverts where the people were sitting on the bus <ZF1> and <ZF0> and the
 <tc text=pause> I don't want to be sitting on thirty-five <ZGY> <M01> No but
 supporting it she's on I think she's sitting on the fence a bit at the moment
 why it ties in a minute but she is sitting on the fence because it's a rural
 often. Her main position in life is sitting on top of the garage roof. <M01>
 re both sitting on <ZF0> you're both sitting on equities which enable me <ZF1>
 me hit the person who was actually sitting on a stool next to me broke his
 ten hours today most of my work is sitting on a rank it is not actually
 I think the problem is we have been sitting on a little island for far too
 <F01> I <ZGY> <ZF1> I'm <ZF0> I'm sitting on a tomb dear. <tc text=laughter>
 <F0X> but erm and then # <F0X> She's sitting on the seat <ZGY> a very big seat
 weeks after er it had been on I was sitting on the bus and I suddenly looked
 there's a reason. She's always sitting on a chair. <M01> <ZGY> FX I haven't
 influence er people who are perhaps sitting on a fence as I was. <M01> Mm.
 where the record company is actually sitting on it to such an extent that I've
 s your car gone. So you've been sitting on Sutton Bank enjoying the view
 got a bit cold. <M01> Oh dear is he sitting on your lap now? <F01> No I've got
 that leads up onto the stage. I'm sitting on the stage with my back to er
 my best side? She said You're always sitting on it. <M01> <tc text=laughs>
 you see I was not only sitting on the Education Committee which
 car. <M02> Mm. <F01> I know we were sitting on each other's knees in the back
 And you felt as though you were sitting on the edge of your <F01> Well you
 he'd just walked down and he'd been sitting on the bench. And I can remember
 the other one was er the hen was sitting on eggs they send the hen away
 people. There's three million people sitting on the dole in this country at the
 a spectator it's a bit rough to be sitting on an unprotected er grass bank or
 <M01> And just thankful that he's sitting on other people's shoulder and not
 <F0X> I wasn't there I was just sitting on the floor dreaming. <F0X> You
 lot at dinner. I said Yes but I was sitting on the other side and she had to
 charge and I went to swim and I was sitting on the bottom step I think of a
 domestic way you know somebody was sitting on a pouffe <ZF1> and <ZF0> and
 there. <F02> Yeah it is. If When I'm sitting on that side of the table <F01>
 Somebody doesn't know what they're sitting on do they. <F01> Well what it is
 So I said h # No idea. And she was sitting on the side of the track on <ZF1>
 in the top near the top bag it was sitting on top of the other ones. <F01>
 you told me. <F01> That's what's sitting on top of the toilet. <F02> <ZGY>
 little little <tc text=pause> He was sitting on the nest <ZZ1> goes outside

that I've written actually. They're sitting on my desk <F05> Yeah. <M01> and I morning I woke up and the cat was sitting on my chest and I could see she i # I'm looking at her now. She's sitting on my windowsill in my # bay
 Is that in fact if they are not sitting on their backsides # doing nothing a year ago # <M01> Oh it's been sitting on the shelf then # <F01> Yes. Mr in the mouth # <F06> No she's just sitting on my lap playing with my keys and like now <M01> Yeah. <F01> they're sitting on a living thing it's still alive run with the gear. And he was sitting on a Cadbury's flake right. And that you really love and you're just sitting on the couch and you don't want to

Abbreviations

ACC=accusative; ADV=adverb; DIR=directional; GEN=genitive; NEG=negative; NOM=nominative; PRES=present; TOP=topic.

Notes

1. Note, though, that the German stative verbs *sitzen*, *stehen* 'stand', and *liegen* 'lie' are also attested with the action meaning at different times in the history of the language (contra modern usage). Compare examples such as *aufs Pferd sitzen* 'sit on the horse' with an accusative case of *das Pferd* 'the horse', signalling the action of sitting rather than the state of being seated (Grimm and Grimm 1878:1299). The close integration of the action and state components in the sitting, standing, and lying events helps explain the semantic variability in these verbs in the history of the language.
2. Shirai (1998:663–5) argues that these two meanings, progressive and resultative, can be regarded as instantiations of a single "duration of a situation" meaning, with the particular submeanings arrived at through interaction of *te iru* with the verb semantics. The combination of progressive and resultative meanings is also the range of the "stative" aspect in Iroquoian languages, as discussed in Chafe (1980) and Mithun (1999:165–6). With some ("nonconsequential") verbs, the stative indicates ongoing events, whereas with other ("consequential") verbs, the stative indicates the state resulting from a previous event.
3. Kita (1999:325) is right to call the posture verbs "punctual" change of state verbs in the sense that the change-of-state phase of the posture verbs is not prolongable. However, the posture verbs are "non-punctual" when they refer to the maintained states.
4. Although the term "progressive" has been used by some authors to describe the functions of both English *V-ing* and Japanese *te iru* constructions, the details of the functions differ in the two languages. We prefer to refer to the constructions as *V-ing* and *te iru* to avoid the suggestion that they are identical in function.
5. There are figurative uses of the posture verbs which do not imply a bounded event and in these uses the progressive is ungrammatical. Compare the uses of *lie* below, taken from Langacker (1991:94):

- (i) Belgium lies between Holland and France.
- (ii) *Belgium is lying between Holland and France.
- (iii) *Peter lies on the beach right now.
- (iv) Peter is lying on the beach right now.

When used to refer to permanent location as in (i), *lie* is not used in the progressive. When used to refer to temporary location, *lie* requires the progressive, as in (iv).

6. Indeed the bias toward taking the state of being seated as the prolongable subpart of the sitting event is so strong that even *be sitting down* is able to refer to the continuing state:

- (i) I have been sitting down for so long that my legs have gone numb.
- (ii) I am not used to sitting down for a long time.

Here, the use of the progressive and a durative adverbial phrase provide a strong enough stative context to counter the common expectation of motion with *down* (cf. Talmy 1985: 145, fn. 29).

7. *Down!* can of course be used by itself as a command to move into a position.

8. *Down* can occur comfortably as a modifier of prepositional or adverbial phrases, such as *Kim is down in the basement*, *Kim is down here* etc., where there is no concrete motion towards the 'down' location. In these cases, however, *down* is functioning as a modifier of the following phrase which is not the context relevant to understanding the *sit down* construction. Nevertheless, as a modifier of a locative phrase, *down* still invokes an image of a mental path one follows down to a designated location as part of the conceptualization of the scene.

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CHAPTER 4

Posture and existence predicates in Dene Sų́líné (Chipewyan)

Lexical and semantic density as a function of the
'stand'/'sit'/'lie' continuum*

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1. Introduction

Most speakers of North American English, if forced in a cloze test to choose between the verbs *standing*, *sitting*, and *lying* to finish the following sentences,

- (1) A brilliantly flowering chestnut tree is _____ near the park entrance.
- (2) I thought I left my coffee cup _____ here. Have you seen it?
- (3) Don't leave your favorite fountain pen _____ around on my desk.

would not hesitate to insert the verbs in the order given. English speakers routinely use posture predicates to locate objects, either permanently or contingently. In doing so, they are tapping into a productive yet tacit system which is sensitive, above all, to the gross shape and general axial orientation of the (in)animate object being located. On the other hand, if the same speakers were asked to interpret the following sentences,

- (4) A brilliantly flowering chestnut tree is **sitting** near the park entrance.
- (5) I thought I left my coffee cup **lying** here. Have you seen it?
- (6) Don't leave your favorite fountain pen **standing** around on my desk.

they would probably report that (4) is unacceptable, that (5) suggests the cup is on its side, and that (6) implies the pen is in some kind of holder. Even when functioning as locational or existence predicates, the cardinal English posture verbs impose a powerful yet covert semantics on their themes. Speakers can routinely and appropriately apply the posture verbs to a wide range of situated objects. Moreover, their selection usually enjoys a general consensus

across speakers, even for rather novel items and situations as in (7)–(9):

- (7) A freshly picked apple was {*standing/sitting/?lying} on the counter when I walked in.
- (8) There were two suspicious envelopes {*standing/sitting/lying} in his mailbox when he returned home.
- (9) Your muddy boots are {standing/*sitting/?lying} neatly in the corner where I carefully left them.

Whatever it is that motivates lexical selection in these cases, it does not hold true of all languages. Indeed, while there is something conceptual to the distribution of posture predicates in English, there are also usage conventions which English speakers typically conform to. These twin dynamics, in all probability, make no two languages alike in the syntax and semantics of their ‘stand’, ‘sit’, and ‘lie’ predicates. As the chapters in this volume illustrate, languages partition their posture lexicons differently subject to contrasting motivations and expressive need. Alternatively, languages seem to be differentially sensitive to a range of semantic properties and morphosyntactic potential associated with posture verbs. This chapter discusses the Dene Sųtıné case (henceforth Dene) and links the lexico-syntactic behavior of the posture verb stems to a continuum of agentivity and degree of sensorimotor control — two notions as experientially based as gross shape and general axial orientation, which were exemplified in the sentences above. To some extent, shape and orientation play a role in this Athapaskan language as well, but not to the same degree as in English. In the next section, I discuss experiential aspects of the cardinal posture predicates in broader terms and with regard to their potential morphosyntactic expression.

2. An experientially-based posture continuum: ‘stand’ > ‘sit’ > ‘lie’

In most languages, the cardinal postures and the verbs that lexicalize them can be thought of as falling out on a continuum of agentivity and/or degree of sensorimotor control. Accordingly, the posture predicates often exhibit differences in lexico-syntactic behavior in diverse languages. In some languages, they may pattern collectively or idiosyncratically. In other languages, ‘stand’ verbs, which require a high degree of physical effort or control, may manifest a different set of morphosyntactic behaviors or distributions than do ‘sit’ and ‘lie’ predicates, which by contrast require little or no physical effort or control. Still other languages may group ‘stand’ and ‘sit’ verbs together at the expense of ‘lie’. What we find in Dene, is more or less a three-way partition that is nevertheless sensitive to the sensorimotor control continuum.

But what exactly is the basis of this purported cline in sensorimotor control? In truth, there are multiple experiential gradations involved, depending on the relative salience of the particular feature being considered in an individual language's conceptual structuring. The three cardinal postures, 'stand', 'sit', and 'lie', clearly differ on a number of visual counts. A person in a standing position is more extended vertically than a person in a sitting position. With vertical height usually goes greater visibility, especially when the perceptual target is being viewed from a distance. Likewise, someone sitting is generally more visible than someone lying down. So in terms of verticality and visibility, we have a linear function spanning the postures of standing, sitting, and lying. On the other hand, a U-shaped function describes the relationship linking standing, sitting, and lying with respect to the feature of extendedness.

Moving from the perceptual domain to the kinesthetic, the different posture verbs are associated with various activities. That is, each posture can be maintained — to a point — while the subject engages in other activities. For example, the range of collateral activities that one can perform while standing typically include talking, walking, and other locomotive actions, ironing, performing surgery, cutting someone's hair, playing a musical instrument, and even eating. One can also talk, iron, play an instrument, cut someone else's hair, etc., while sitting, but walking while in a sitting position cannot be sustained, nor do surgeons typically operate while sitting (although they may be perched on a stool). Sitting is typically the posture associated with eating, reading, and conversing. It is an intimate social posture (as opposed to standing, which is a far more formal interactional posture). Students sit, spectators and audience members typically sit, and people sit when they are engaged in an activity that requires concentration or that is sustained for a period of time, such as watching TV, working at a computer, or playing cards. By contrast, lying is the posture most often associated with relaxation and sleep. One can read or eat or talk or watch TV while lying down, but walking, performing surgery, cutting someone else's hair, or ironing are virtually impossible and playing an instrument or a game of cards or using a computer keyboard are extremely difficult. In short, the degree of attention, endurance, and sensorimotor control needed for standing, sitting, and lying generally correlates with that needed for the activities most canonically associated with these postures. Sleeping requires much less cognitive awareness or proprioceptive control than driving a car or removing someone's appendix. On the other hand, an episode of sleeping usually persists for a longer period of time than a game of cards or a public lecture given from a podium. Table 1 summarizes some of the conceptual and kinesthetic correlates of this proposed posture continuum.

These postures are presumably the cardinal ones, common to all healthy humans, albeit with some cultural variations (e.g., postures such as 'kneel', 'squat', or 'crouch' may be especially prominent in some cultures, be frequent in

Table 1. Features and values associated with the ‘stand’/‘sit’/‘lie’ posture continuum

	‘stand’	‘sit’	‘lie’
a. Agency, intentionality	<i>high</i>		<i>low</i>
b. Sensorimotor control	<i>high</i>		<i>low</i>
c. Collateral activity	<i>high</i>		<i>low</i>
d. Verticality, visibility	<i>high</i>		<i>low</i>
e. Typical socio-cultural value	<i>high</i>		<i>low</i>
f. Extendability in space	<i>high</i> (vertical)	<i>low</i>	<i>high</i> (horizontal)
g. Extendability in time (endurance)	<i>low</i>		<i>high</i>

their languages, and therefore occupy mid positions along these continua). What remains to be seen are the linguistic correlates which follow from the experiential gradations listed in (a)–(g) in Table 1. The working assumption, consonant with much recent cognitive linguistic theorizing (cf. Johnson 1987; Langacker 1991; Newman 1996; Nuyts and Pederson 1997; Lakoff and Johnson 1999; Talmy 2000), is that since grammar is informed by cognition, and cognition is informed by everyday human experience, there will be a correspondence — perhaps to the point of implicational or typological markedness hierarchies — between these posture-based continua and the morphosyntactic behavior of posture verbs in a particular language. It is important to emphasize that the posture verbs themselves are under no obligation to exhibit categoriality in their distribution or behavior in any language. That is, individual languages or language families might select or ignore any of the features in Table 1 as covert categories relevant for linguistic coding. Likewise, languages and their speakers are free to ascribe particular values of these features to the individual posture verbs. What the present hypothesis about an experientially-based posture continuum does assert is that while a language might deem that all posture verbs manifest a low degree of agency and therefore all take any concomitant low-agency marking, no language will accord a high degree of agency or high-agency marking to ‘lie’ verbs but only a low degree to ‘stand’ verbs. In short, because the features in Table 1 are experientially grounded, it is highly unlikely, both typologically and language-specifically, that the values for these features will be reversed or that morphosyntactic correlates of these features are applied randomly across the posture lexicon.

3. The morphosyntax of posture predicates in other languages

The chapters in this volume explore the behavior of posture predicates in individual languages with respect to a variety of standard morphosyntactic phenomena such as

stativity, (in)transitivity, case marking, aspectual coding, event conflation, animacy, lexical density, figurative extension, and grammaticalizability. With respect to this last category, posture predicates are somewhat susceptible to reanalysis as tense/aspect auxiliaries, deictic markers, and honorifics or other classifiers. Regardless of the actual function to which posture predicates are put in various languages or the special coding that they take, the fact remains that different languages differentially categorize the cardinal posture predicates with respect to various marking phenomena. Conversely, the posture predicates either behave continuously or categorically with respect to some set of morphosyntactic phenomena. Newman (ms.) has surveyed some of this variety, which I have restated below in Table 2 along with a proposed typology of posture partitions, given in the left-hand column.

Table 2. The five logical morphosyntactic partitions for a language's cardinal posture predicates (S, s, L stand for 'stand', 'sit', 'lie', respectively)

Language type	Examples
S/s/L	Yuchi: 'stand', 'sit', 'lie' morphemes have grammaticalized into 3-way gender system (Watkins 1976)
S/sL	Manam: 'stand' is an active verb, while 'sit' and 'lie' are stative verbs, (Lichtenberk 1983) German: 'stand up' is an intransitive verb comprised of a stem plus separable prefix, whereas 'sit down' and 'lie down' use a reflexive
Ss/L	Tsova-Tush: imperfective 'stand' and 'sit' take ergative and absolutive subjects, while imperfective 'lie' takes only absolutive subjects (Holisky 1987)
SsL	Acehnese: all three are "control" predicates (Durie 1985) Tongan: all three take absolutive subjects French: all three are complex stative verbs with <i>être</i> and allow reflexives Tobelo: all three take agentive subjects (Newman ms.)
s/SL	Tobelo: 'sit' is morphologically an intransitive verb, whereas 'stand' and 'lie' both use a reflexive morpheme in their formation (Newman ms.)

Of course, statements like those summarized in Table 2 greatly overstate matters typologically and hardly do justice to an individual language's rich morphosyntax with respect to the posture verbs. It is probably the case that few languages partition their posture sets exactly the same way for all semantic or morphosyntactic criteria relevant to the language. This is certainly true of Dene, as described at length in the next section. Indeed, if one were to scratch below the surface and survey a variety of phenomena in a great number of languages, one would probably find that most languages subgroup the postures differently (that is to say, inconsistently) across different parts of the grammar or lexicon. For

example, Newman (ms.) describes the Tobelo case in which all three posture verbs occur with agent subjects (as opposed to patient subjects in this split intransitive language). However, Tobelo also morphologizes these verbs differentially. In this case, it is the ‘sit’ predicate which is the outlier. Both ‘stand’ and ‘lie’ are composed with a reflexive morpheme and mean roughly ‘to hold oneself up’ and ‘to stretch oneself out’ respectively. Thus, one might speculate — not unreasonably — that the feature HIGH EXTENDABILITY IN SPACE might have motivated their lexicalization as opposed to ‘sit’, whereas a feature such as HIGH AGENCY might apply to the three posture verbs equally and thus have motivated their all taking agentive subjects. We certainly cannot conclude anything for sure about this or any language unless we look across the entire verb lexicon and syntactic system.

The point is, with respect to criteria such as those sketched in Table 1, it is probably less likely that languages and morphosyntactic markers differentially select ‘stand’ and ‘lie’ predicates to the exclusion of ‘sit’. Afterall, EXTENDABILITY IN SPACE is the only apparent experiential feature which they both share. (Arguably, an inanimate object can be stood up or otherwise be said to stand if it has external support, thus manifesting no greater agency than that required of an object lying around supported by a horizontal surface.) Clearly, most of the listed characteristics treat the postures continuously, not categorically. Therefore, it seems plausible that s/SL and S/s/L behavior will be typologically marked (except insofar as the posture verbs function as theme classifiers as is covertly the case in the English examples in (1)–(9)), while posture verbs in most languages will consistently manifest SsL, S/sL, or Ss/L morphosyntax. I now turn to the Dene case and show that even across a disparate set of morphosyntactic behaviors, the posture verbs conform, albeit erratically, to a continuum of agency and control. COLLATERAL ACTIVITY, VERTICALITY/VISIBILITY, and EXTENDABILITY IN TIME may play very minor roles as underlying conceptual features in this language, while TYPICAL SOCIOCULTURAL VALUE and EXTENDABILITY IN SPACE seem to play no role at all in the organization and expression of posture predicates in Dene.

4. The Dene case

4.1. Main typological features

Dene Sų́łiné (formerly known as Chipewyan) is an Athapaskan language spoken in the western Canadian subarctic and is closely related to Slave and Dogrib, as well as to its better known southern cousins, Navajo and Apache, spoken in the southwestern United States. The basic word order is SOV. However, since subject and object pronominal prefixes are obligatorily incorporated into the verb word, a Dene verb word has propositional content and can stand alone in all of its

polysynthetic glory. Understandably then, the typical Dene predicate is daunting in its morphological complexity. This is due partly to the sheer number of morphemes potentially integrated into the verbal unit, but also because of the extensive tonal and morphologically conditioned phonological alternations that occur, as well as the frequent contractions, elisions, and metatheses that take place in normal speech. The language as a whole supports a fair amount of suppletion and allomorphy in addition to a high degree of stem polysemy. Table 3 illustrates the above points with a partial conjugation paradigm for simple forms (i.e., no additional adverbial prefixes beyond the momentaneous or change-of-state prefix *nε-*) of the Dene verb corresponding roughly to the English *lie down*. Note that the shape of the word-final stem (roughly, the last syllable) varies with number (SG vs. DU/PL) and tense/aspect (IMP vs. PERF vs. OPT).

Table 3. A Dene conjugation paradigm for ‘lie down’ (from Li 1946:413)

	Imperfective	Perfective	Optative
1SG	<i>nεstéih</i>	<i>nit̥j < nε-θε-i-t̥j</i>	<i>nusté < nε-ywa-s-té</i>
2SG	<i>n̥t̥éih < nε-n-téih</i>	<i>n̥t̥j < nε-θε-n-t̥j</i>	<i>n̥uté < nε-ywa-n-té</i>
3SG	<i>nεtéih</i>	<i>nεðt̥j</i>	<i>n̥uté < nε-ywa-té</i>
1DU/PL	<i>n̥t̥és < nε-í-d-tés</i>	<i>nεθítez</i>	<i>n̥utés < nε-yθwa-í-d-tés</i>
2DU/PL	<i>nuhtés</i>	<i>nuhtez < n̥ε-θε-uh-t̥j</i>	<i>nuhtés < nε-ywa-uh-tés</i>
3DU/PL	<i>henetés</i>	<i>henéðtez</i>	<i>henutés</i>

According to traditional accounts, the Dene verb word consists of a *verb theme* (the basic lexical entry made up of a stem and one or more thematic prefixes) and some number of additional, often discontinuous, prefixes. Li (1946:410) claims that Dene has 10 prefix slots which, descriptively, are characterized in the list in (10) and ideally aligned in the diagram in Figure 1, in keeping with the so-called templatic model of the Athapaskan verb (cf. Kari 1989 or K. Rice 2000 for discussion or McDonough 2000 for an alternate account).

- (10) i. incorporated postpositions (often preceded by their pronominal objects)
- ii. local and adverbial prefixes
- iii. iterative prefix
- iv. incorporated noun stems
- v. 3rd person pronominal subjects
- vi. pronominal objects
- vii. modal prefixes
- viii. aspectual prefixes
- ix. 1st and 2nd person pronominal subjects
- x. (valency) classifiers

PP	Adv	Iter	Incorp	Pron Subj 3rd	Pron Obj	Mode	Asp	Pron Subj 1st/2nd	Class	VERB STEM
1	2	3	4	5	6	7	8	9	10	

Figure 1. A templatic rendering of the Dene verb prefixes + stem (after Li 1946)

In addition to the potentially complex prefixal alternations, Athapaskan languages — and Dene Sųłiné is no exception — also manifest a particular type of verb stem alternation between controlled and uncontrolled actions. That is, these languages have lexicalized a semantic difference with respect to the nature of an action carried out by a human. Curiously, the Dene posture verbs *individually* seem impervious to the controlled/uncontrolled distinction and so there is, for all intents and purposes, no stem alternation affecting posture verbs which is based solely on control, although this distinction is widely evident in verbs of giving and taking (cf. S. Rice 1998a:103–4). Nevertheless, the posture verbs *as a whole* are affected globally by a controlled/uncontrolled distinction, as discussed in the next sections.

4.2. The stem system (classificatory or not)

In Dene, all of the stative posture predicates are neuter verbs that take the so-called *the-* perfective as the imperfective thematic prefix (Li 1946:412). To get an active reading, along the lines of *stand up* or *sit down*, the *the-* prefix for this set of stems is simply replaced by the momentaneous prefix *ne-*. An example equivalent to English *lie down* was given above in Table 3. Additional active examples can be found in Table 6 below. Morphologically, therefore, the cardinal posture predicates seem to form a recognizable lexical set. However, matters are far more complicated than this superficial similarity suggests. Not surprisingly, the lexical density of the posture stem sets as well as the range of participants a posture stem can take is linked, negatively, to degree of control. The more agentivity and sensorimotor control required, the smaller the stem set and the fewer the options for thematic participants. This strong negative correlation in Dene between lexical density of the stem sets and degree of control is illustrated in Table 4.

As can readily be seen, the maximum degree of sensorimotor control required for standing corresponds to a stem inventory of exactly one (at least for 3sg), while the minimum sensorimotor control required for lying and the great configurational variation whereby animate and inanimate objects can be at rest corresponds to a stem inventory of at least ten (depending on whether the object at rest is animate, dead, sticklike, hard/round, flat/flexible, etc.), not counting aspectual or mode-induced stem alternations. As with all Athapaskan languages, Dene posture predicates fall into the much wider set of classificatory verbs in which the stem

Table 4. The Dene posture predicates (3SG stative stems)

'stand'	'sit'	'lie', 'sleep' ('be-at-rest')
<i>theyi</i>	<i>theda</i>	(j <i>q</i>) <i>theti</i> (animate object, or AO) (j <i>q</i>) <i>theti</i> (dead object) (j <i>q</i>) <i>theti</i> (round, compact object, or RO) (j <i>q</i>) <i>theti</i> (stick-like object) (j <i>q</i>) <i>thetchúdh</i> (flat, flexible object) (j <i>q</i>) <i>thekár</i> (flattened, formerly taller object) (j <i>q</i>) <i>thekq</i> (liquid object) (j <i>q</i>) <i>theti</i> (contained object) (j <i>q</i>) <i>thedzái</i> (granular object) (j <i>q</i>) <i>thela</i> (e.g., a book, a plurality of objects)
'3SG is standing'	'3SG is sitting'	'3SG is lying (here)'

form changes according to shape, animacy, and/or physical consistency characteristics of the 'thing' being located or handled (cf. Li 1946; Davidson, Elford, and Hoiijer 1963; Haas 1968; S. Rice 1998a). The Dene 'lie' stems are essentially existence predicates and are most felicitous when accompanied by a deictic or other locational expression. In any case, the 'lie' set is the most dense set lexically. To be fair, of the three posture cardinal posture sets, only 'lie' (or 'be at rest') predicates could truly be termed classificatory in this language, thus requiring a semantic match between stem choice and physical or configurational properties of the subject or thematic NP. Nevertheless, it could be said that 'sit' and 'stand' predicates are also partially sensitive to shape and animacy characteristics of their subjects, as will be shown in some of the discussion which follows.

4.3. The stem inventory (number of lexical variants)

Relatedly, there is another kind of lexical density that differentially affects the 'lie' set compared to 'sit' or 'stand'. Even if we exclude the non-animate, existential forms, we find that the animate 'lie' or 'be at rest' stems are susceptible to polysemous interpretation while the 'stand' or 'sit' stems are not. 'Lie (animate)' carries the obvious inference of 'to sleep', while 'to lie around' can also mean 'to dream'. Moreover, it could be argued that there are two separate animate 'lie' stems depending on whether the (living) body is lying face-down, face-up, or on one side. These facts are summarized in Table 5.

With respect to the discussion above on a controlled/uncontrolled distinction manifesting itself in the Dene posture verb inventory, one could argue that due to the high degree of energy and agency required for standing and perhaps sitting, there is essentially only one way to assume either position. On the other hand,

Table 5. The Dene posture predicates (stems for AO)

'stand'	'sit'	'lie', 'sleep' ('be-at-rest')
<i>theyi</i> 'AO is standing'	<i>theda</i> 'AO is sitting'	<i>thetj</i> 'AO is lying/sleeping' (even if AO is sleeping while sitting or standing) <i>echqnetj</i> 'AO is lying on stomach' (< <i>echq</i> 'one's stomach') <i>daghella</i> 'AO is lying on back' (lit. 'RO extends/faces upwards') <i>yaghella</i> 'AO is lying face down' (lit. 'RO faces downwards')

there are several salient ways to be prone or otherwise out of control posturally. The direction one faces while standing or sitting is more contingent on the situation rather than intrinsic on body orientation, as is the case with lying. Therefore, we find another demonstration of stem density correlated with degree of control.

4.4. The stem inventory (number distinctions)

One could consider a further kind of lexical density which differentially affects the posture predicates involving suppletive stem forms. In Dene, the stative 'stand' predicate features the same stem form for singular and dual, but a contrasting form for plural. Stative (and animate) 'lie', on the other hand, features a stem collapse for dual and plural, with a separate form for singular. However, stative 'sit' manifests a three-way contrast, whereby singular, dual, and plural each have their own stem. Matters are a bit more complicated for their active counterparts. Active 'stand' has an entirely different set of suppletive stems and maintains a three-way number distinction. Active 'sit' and 'lie' use the same basic stem forms as in the stative, although there are tonal changes. Table 6 summarizes the nature and extent of this stem suppletion.

While the 'stand' stems are remarkable in their diversity, they are so entirely and arbitrarily suppletive that it is hard to make sense of the contrasts based on available information from speakers. On the other hand, the special marking enjoyed by the 'sit' set may be related to or reinforced by a figurative sense that it sustains. As discussed below, the dual forms *theke* 'they two are sitting' or the momentaneous *heneke* 'they two sat down' carry the somewhat natural inference of being or getting married. In many Amerindian cultures, a spouse is referred to as 'the one I stand with', 'the one I lie with', and even 'the one I walk with'. It is

Table 6. Dene stative and active posture stem distinctions as a function of number and stativity (totals in parentheses)

Stativity and stem suppletion			
<i>Stative stems</i>			
	'stand' (2)	'sit' (3)	'lie' (2)
SG	<i>theyĭ</i> 'S/he is standing'	<i>theda</i> 'S/he is sitting'	<i>thetĭ</i> 'S/he is lying, sleeping'
DU	<i>heheyĭ</i> 'They're both standing'	<i>heheke</i> 'They're both sitting'	<i>hehetez</i> 'They're both lying, sleeping'
PL	<i>nareĭya</i> 'They are standing'	<i>déłtth'i</i> 'They are sitting'	<i>thetéz</i> 'They are lying, sleeping'
<i>Active stems</i>			
	'stand' (3)	'sit' (3)	'lie' (2)
SG	<i>nihigha</i> 'S/he is standing up'	<i>nedá</i> 'S/he is sitting down'	<i>netí</i> 'S/he went to sleep'
DU	<i>ninet'ás</i> 'They're both standing up'	<i>heneké</i> 'They're both sitting down'	<i>henetéz</i> 'They both went to sleep'
PL	<i>ninedét</i> 'They are standing up'	<i>denéłtth'i</i> 'They're all sitting down'	<i>netéz</i> 'They went to sleep'

understandable, therefore, that a unique dual form for 'sit' should exist and remain in Dene. Nevertheless, it is not clear why active 'stand' also maintains this three-way distinction, while neither active nor stative 'lie' do, especially given the rather universal importance and procreative potential of two people lying together.

4.5. Valency alternations

Moving to more syntactic manifestations of a posture continuum, we find additional ways in which the posture verbs in Dene behave differentially. While all three verbs can participate in periphrastic causative constructions, there is no lexical causative for 'stand' (at least not involving animate themes and based on the *-yi/-ya* stems), although 'sit' and 'lie' both have lexical and periphrastic causative counterparts (see Table 7).

This restrictiveness for 'stand' is perhaps related to the fact that the degree of agency or control is so great for being or becoming upright, that the stander cannot be relegated to being a passive, acted-upon participant. In any case, for the

Table 7. Lexical and periphrastic causatives as a function of stem set in Dene

	Lexical causative	Periphrastic causative
'stand'	* *'I stood him/her (up)'	<i>theyj̥ ṛáslá'</i> 'S/he's standing — I did it'
'sit'	<i>seghathálda</i> 'I sat him/her beside me'	<i>theda ṛáslá'</i> 'S/he's sitting — I did it'
'lie'	<i>beteghé ninílt̥j̥</i> 'I laid him/her on the bed'	<i>beteghé net̥j̥ ṛáslá</i> 'S/he's lying on the bed — I did it'

first time we find that 'stand' stands apart from 'sit' and 'lie' in its morpho-syntactic behavior. This is fairly understandable when we consider the high degree of volitionality, agency, and control that we usually ascribe to standing. It would be very unusual indeed if the correlation went in the other direction, viz. if the 'lie' predicates lacked a lexical causative while 'stand' had one.

4.6. The participant inventory

In the preceding sections, I discussed examples which have shown how the size of the Dene posture stem inventories correlates with the lack of control: the greater the stem set, the lesser the amount of control required for the posture. One can extend this notion to a different kind of correlation. Posture stem density also covaries with the range of participants a stem can take. Whereas all physical objects can be said to 'lie' or 'be at rest', thus necessitating a relatively large 'lie' or 'be at rest' stem inventory, only a subset of living animate objects (humans and certain animals) can 'sit', while only humans and an even smaller handful of largish mammals can 'stand'. Table 8 suggests the range of themes that each posture predicate can describe.

General axial orientation and extendedness seem to play minor but appreciable roles in distinguishing which animals are designated via the 'stand' predicate and which are designated with 'sit'. Note that inanimate objects, no matter how salient or extended vertically, cannot be said 'to stand' in Dene. Note, too, that canines and felines, like humans, have distinctive stand, sit, and lie postures and therefore can be located or described using any of the specific animate posture predicates. Larger mammals, such as ruminants and herd animals, are rarely if ever observed sitting, so these animals cannot be said 'to sit' in Dene. Birds, on the other hand, generally have long legs relative to their bodies and may be described as standing or sitting equally well. Smaller mammals and rodents, as well as certain amphibians and insects, are so intrinsically compact that they are naturally designated or located using a variant of 'sit'.

Table 8. Possible and impossible themes for the different Dene posture predicates

	‘stand’ <i>theyj</i>	‘sit’ <i>theda</i>	‘lie’ (animate) <i>thetj</i>	‘lie’ (dead) <i>thetj</i>
Animate	human	human	human	human
	dog/wolf/ coyote	dog/wolf/ coyote	dog/wolf/coyote	dog/wolf/coyote
	cat	cat	cat	cat
	horse/buffalo/ moose	*horse/buffalo/ moose	horse/buffalo/ moose	horse/buffalo/ moose
	bird	bird	*bird	bird
	*beaver/squirrel	beaver/squirrel	*beaver/squirrel	beaver/squirrel
	*frog	frog	*frog	frog
	*bug	bug	*bug	bug
	*snake	*snake	snake	snake
Inan.	*house	*house	*house	*house
	*tree	*tree	*tree	*tree

In the right-most column of Table 8, I list the Dene form for dead or formerly animate ‘lie’, which makes no distinction at all between human and non-human animals. Understandably, being dead involves such complete lack of control that size, compactness, or general axial orientation become irrelevant. Because of their semantic overlap, it may not be too surprising that the dead ‘lie’ stem, *-tj*, is identical to the causative ‘lie’ form (cf. Table 7), which incorporates the transitivizing valency classifier, *-t-*, in prefix position 10 (cf. Figure 1).

Again, unlike the English examples for *tree*, *coffee cup*, and *pen* in examples (1)–(9), animate posture predicates in Dene do not extend existentially to inanimate participants or to animate participants lacking the canonical shape or axial orientation (except under very special figurative circumstances, as discussed in the next section). Indeed, there is not a lot of semantic extension generally for these items in Dene. In the next section, I provide a few examples of figurative applications of ‘sit’ and ‘lie’. But first, let me note that there are ways of designating in Dene that a house or a tree is upright and these verbs generally get translated into English via *stand*. Some examples are given in (11).

- (11) a. *jə dechen naghjʔa*
PROX tree up.3SG.S.extends.RO
‘A tree is standing here.’
b. *yo ʔəłú naghjʔa*
house still up.3SG.S.extends.RO
‘The house is still standing.’

While there do not appear to be any lexical causatives derivable from these stems, there are other stems in the language which convey transitive or causative ‘stand’.

The example in (12) illustrates such stems.

- (12) no-k'e náyetthi ha
ground-on up.3SG.O.stick FUT
'S/he will stand it up in/on the ground.'

4.7. Figurative extension

As was the case with other morphosyntactic correlates discussed above, we find that the Dene posture predicates are likewise not equivalent in their semantic or pragmatic plasticity. I give some examples in Table 9, showing figurative extension of some of the posture predicates, but these are by no means exhaustive.

Once again, 'stand' is the outlier predicate vis-à-vis the other posture stems. There appear to be no figurative expressions involving 'stand' at all. While my

Table 9. Figurative extension possibilities for Dene posture predicates: extended usages

'stand'	*
'sit'	<i>ʔelka theke</i> 'They're married' (Lit. 'They two are sitting together')
	<i>tʔareɖa</i> 'S/he's resting, s/he's lazy' (Lit. 'S/he's butt-sitting')
	<i>yeke'tʔ'aghéda</i> 'S/he's delaying a decision' (Lit. 'S/he's butt-sitting on it')
	<i>beyaze ʔechqtheɖa</i> 'She's pregnant' (Lit. 'Her child sits in (her) womb')
	<i>je'th ghq theɖa</i> 'S/he's fishing' (Lit. 'S/he sits about a hook')
'lie'	<i>náte</i> 'AO is dreaming (Lit. 'AO lies/sleeps again, AO lies/sleeps around here and there')
	<i>the'elchúdh</i> (flat, flexible stem) 'S/he's lying there like a couch potato' (Lit. 'Flat object is lying')
	<i>the'kár</i> (flattened, formerly taller stem) 'S/he's lying there like s/he's been knocked out' (Lit. 'Flattened object is lying')
	<i>daghé'ʔq</i> 'AO is lying on back' (Lit. 'RO extends upwards')
	<i>yaghe'ʔq</i> 'AO is lying face down' (Lit. 'RO extends downwards')

consultants had little trouble providing examples of figurative ‘sit’, the situation with ‘lie’ is a bit more complicated, as I will discuss in a moment. As for figurative sitting, I have already alluded to one extension of dual ‘sit’ meaning ‘to be or get married’. With an incorporated nominal object, *t’a-* ‘backside’, ‘sit’ can also carry the inference ‘to rest’ or ‘to be lazy’, which can even extend to ‘sitting on something’ as in the English ‘delaying a decision.’ In a different kind of example, ‘to be pregnant’ in Dene is also lexically structured from a ‘sit’ base. The image is of a baby sitting in a woman’s womb. Finally, certain collateral activities which habitually involve sitting, as in the case of fishing, are lexicalized periphrastically based on the ‘sit’ stem in combination with a semantically charged postpositional phrase. ‘To fish’ is literally something like ‘to sit about a hook’. Elsewhere I have discussed such “being for doing” metonymies in Dene involving, in essence, something analogous to English prepositional or phrasal verbs (cf. S. Rice 1998b, 1999; Rice and Wood 1996). For example, ‘to swim’ is based on a collocation not unlike ‘to fish’; literally it means ‘to stay in water’. As for ‘lie’, one could probably treat ‘to dream’ as an extension of animate ‘lie’, a not too surprising possibility given the general inference of sleeping for lying. Dreaming is comprised of the ‘lie’ stem plus the iterative or distributive (depending on the analysis) prefix *na-*. Perhaps because of its essential polysemy, ‘lie’ is already being used metaphorically and metonymically. Therefore, Dene speakers are more likely to extend the inanimate stems to animate themes (rather than the animate themes to new usages) — usually for comic effect. In addition, it could be argued that the use of the round object stem (symbolizing the theme’s head?) given in Table 5 and repeated again in Table 9 counts as an example of figurative extension for ‘lie’ stems.

5. Dene posture predicates: An SS/L, S/SL, or mixed system?

Unlike what happens in many other languages, Dene posture predicates do not seem particularly susceptible to grammaticalization or relexicalization (the ‘sit’ examples in Table 9 excepted). They do not auxilielize, serialize, or deverbalize. They remain essentially literal in their usage. Nevertheless, they do manifest — weakly — evidence of an experientially based posture continuum whereby the three cardinal posture stem sets behave differentially with respect to a variety of morphosyntactic and semantic categories. In Table 10, I summarize some of these characteristics associated with the Dene posture predicates. A quick glance at this table tells us that for no feature except the choice of thematic prefix do the stems for the three cardinal postures pattern the same way. Given the range of phenomena surveyed in this chapter, we would be hard-pressed to assign a typological partition to Dene along the lines of those proposed in Table 2. At a schematic level, the posture predicates form a somewhat coherent class distinct

from other equally schematic predicate classes such as those pertaining to motion, ideation, or change of state. Yet at a more specific level, the posture predicates distinguish themselves across a broad range of lexical and grammatical phenomena.

Table 10. A lexico-syntactic summary of Dene posture predicates

	'stand'	'sit'	'lie'
a. takes <i>the</i> - thematic prefix (in imperfective)	+	+	+
b. is part of classificatory stem system	–	–	+
c. needs locative (i.e., is primarily an existence predicate)	–	–	+
d. has multiple stem inventory	–	–	+
e. exhibits stem synonymy	–	–	+
f. handles inanimates	–	–	+
g. has unique dual stem (in stative)	–	+	–
has unique dual stem (in active)	+	+	–
h. has transitive/causative form	–	+	+
i. handles lower animals	–	+	+
j. allows figurative extension (tolerates stem polysemy)	–	+	+

On the basis of characteristic (a) in Table 10, we might conclude that Dene is an SsL language. For characteristics (b)–(f), we might say it is Ss/L. Based on (g), it would be S/s/L, since each stem set treats the dual differently (cf. Table 6). And, finally, if we use characteristics (h)–(j), we would likely label Dene an S/sL language. Clearly, no single characteristic could or should be taken as typologically conclusive. The net result, nevertheless, is that the ‘stand’ stem set behaves almost wholly opposite to the ‘lie’ or ‘be at rest’ stem set, while the ‘sit’ set is split between the two, sometimes patterning like the former and sometimes patterning like the latter. In short, discrete differences in behavior manifest themselves in such a way that a non-categorical posture continuum is supported and it is supported in exactly the direction that most of the experiential continua in Table 1 suggest.

Finally, it must be noted that none of the Dene posture stems have yet grammaticalized or auxiliarized into more functional markers in the language — a phenomenon which is quite common in many European, African, and Austronesian languages. Nevertheless, facts like those described in the preceding sections show a sensitivity in Dene between agentivity and/or degree of sensorimotor control and the lexico-syntactic behavior of posture predicates, in accordance with functional/cognitive principles which propose a non-random correlation between meaning and form.

Abbreviations

AO=animate object theme; DU=dual; FUT=future; IMP=imperfective; O=object; OPT=optative; PERF=perfect; PL=plural; PROX=proximate; RO=round object theme; S=subject; SG=singular; S/s/L=stand/sit/lie continuum.

Notes

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Boldface is used to indicate the posture stem of a verb.

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CHAPTER 5

Posture verbs in
two Tibeto-Burman languages of Nepal*

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1. Introduction

In this chapter we will examine the syntax and semantics of expressions which, either currently or historically, contain verbal expressions denoting posture (‘sit’, ‘stand’, ‘lie’) in two Tibeto-Burman languages of Nepal: Chantyal (Tibeto-Burman: Bodic: Bodish: Tibetic: Tamangic) and Magar (Tibeto-Burman: Bodic: Himalayish: Kham-Magar). The genetic relationship of these languages to each other and to other members of the Bodic Division of Tibeto-Burman is outlined in Figure 1.

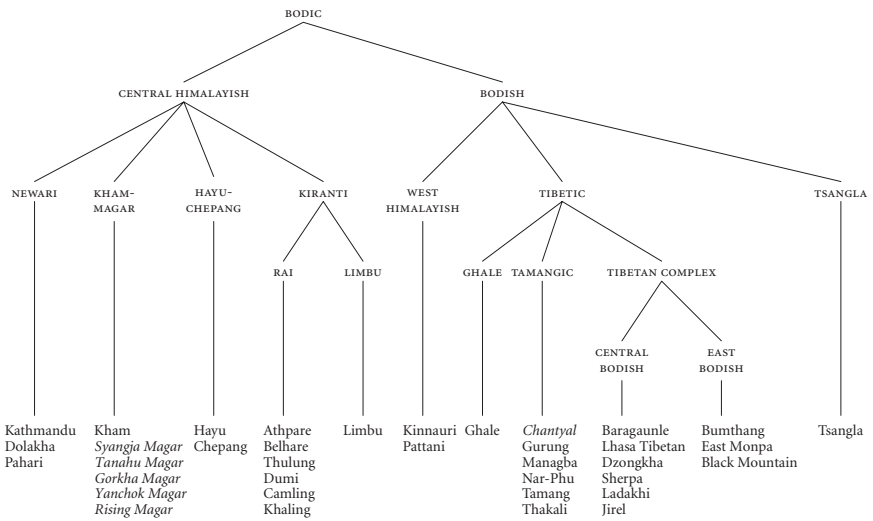


Figure 1. Proposed genetic relationships within the Bodic section of Tibeto-Burman (names of languages included within the present chapter are in italics)

2. Posture verbs in Chantyal

2.1. Introduction

The Chantyal language is spoken by approximately 2,000 of the 11,000 ethnic Chantyal.¹ The Chantyal live in the Baglung and Myagdi Districts of Nepal; the villages where the Chantyal language is spoken are all located in the eastern portion of the Myagdi District and include the villages of Mangale Khāni, Dwāri, Ghyāś Kharkā, Caura Khāni, Kuine Khāni, Thārā Khāni, Pātīle Kharkā, Mālām-pāhār, and Malkābāng. There is relatively little linguistic variation among these villages, though where differences exist, it is the speech of Mangale Khāni that is represented here.

The Chantyal language is a member of the Tamangic group and, within the group, it is lexically and grammatically closest to the Thakali Complex. Assessment of the internal relations within the group is complicated by a number of factors, among which is the fact that shared innovations may be the product of geographic contiguity as much as shared genetic background. At the moment, the most likely classification is set out in Figure 2. Chantyal, however, is in many respects the most deviant member of the group, lacking a tone system and having borrowed a large portion of its lexicon from Nepali. In addition, there appears to be a layer of Tibeto-Burman vocabulary that is not Tamangic.

The Chantyal were traditionally identified as Magars (most printed references refer to them as ‘Chantel Magars’), but this identification was based on a deliberate misrepresentation fostered by the Chantyal for various practical reasons.² In fact, Chantyal and Magar are not especially close genetically, as shown in Figure 1, but they have been in contact for at least two centuries and their grammars have been converging, both through influence of Magar on Chantyal and through influence of Nepali on both (Noonan, to appear b).

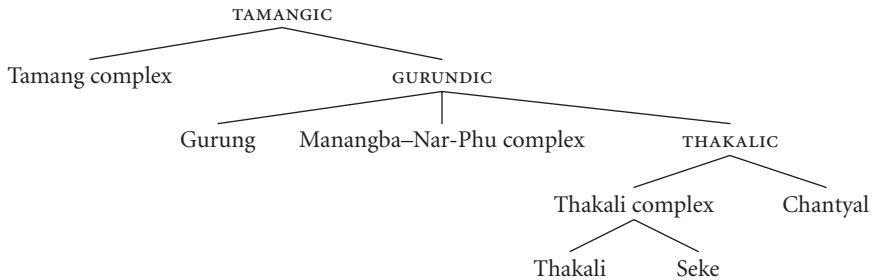


Figure 2. Proposed genetic relationship within Tamangic

2.2. Posture expressions in Chantyal

In this section we will discuss a set of basic expressions denoting posture in Chantyal. By “basic expression”, we mean expressions whose meanings contain the minimum reference to manner available in the language for the expression of a particular posture.

Basic expressions denoting posture in Chantyal consist of a few simplex verbs and set of complex expressions. The complex expressions contain an orientational word and one of a set of generic verbs translating English ‘do’, ‘become’, and ‘happen’.

Expressions denoting ‘stand’ include the simplex verbs in (1) and the complex expressions in (2):

- (1) *yep-* ‘maintain a standing position’
yes- ‘assume a standing position’
- (2) *tharo la-* ‘maintain a vertical position’ (literally: ‘vertical do’)
tharo ta- ‘assume a vertical position’ (literally: ‘vertical become’)
tharo pəri- ‘come to be in a vertical position’ (literally: ‘vertical happen’)

The verbs in (1) refer to muscular activity; they cannot be used with inanimate subjects. The expressions in (2), on the other hand, refer to vertical position and can be used with inanimate subjects also, though see below for more discussion of this.

There is only one basic expression denoting ‘sit’, and it consists of a simplex verb:³

- (3) *ci-* ‘sit’

On the other hand, there are no basic expressions denoting ‘lie’ consisting only of a simplex verb. All basic expressions referring to lying are complex:

- (4) *terso la-* ‘maintain a horizontal position’ (literally: ‘horizontal/flat do’)
terso ta- ‘assume a horizontal position’ (literally: ‘horizontal/flat become’)
terso pəri- ‘come to be in a horizontal position’ (literally: ‘horizontal/flat happen’)
- (5) *wattano la-* ‘maintain a supine position’ (literally: ‘supine do’)
wattano ta- ‘assume a supine position’ (literally: ‘supine become’)
wattano pəri- ‘come to be in a supine position’ (literally: ‘supine happen’)
- (6) *bhūy-ri than-* ‘lie down’ (literally: ‘ground-LOC rest.on’)

The difference between the sets of complex expressions in (4) and (5) rests on the differences in meaning of *terso* ‘horizontal, flat’ and *wattano* ‘supine (face up)’. The latter, since *wattano* makes crucial reference to the face, can only be used with regard to humans and animals; the former, however, can be (and is) used with reference to people and can also be used with inanimates. The expression in (6) includes the verb *than-*, which means literally ‘hang on, rest on’, implying that the subject is being supported or held up by something.⁴

In sum, Chantyal makes extensive use of complex expressions in referring to posture. And, as we have seen, there is no simplex verb denoting the ‘lie’ posture in the language. There is a simplex verb for ‘sit’, however, and no corresponding complex expressions with only this basic meaning. Expressions for ‘stand’ consist of both simplex verbs and complex expressions. This distribution of simplex and complex expressions is consistent with predictions from Givón’s (1984) time-stability continuum and Hopper and Thompson’s (1980) transitivity continuum: ‘lie’, the least agentive and therefore least transitive of the basic posture expressions is the least prototypically verb-like and therefore the one most likely to receive complex expression involving a stative positional word.

2.3. The syntax of posture expressions

Chantyal is a consistently ergative language, which is to say that transitive subjects are in the ergative case, marked by the case clitic *-s*, but intransitive subjects are in the absolutive case, which is unmarked. Direct objects are either absolutive or dative, the latter if their animacy is relevant to the meaning of the clause.⁵

The basic posture expressions described in the last section are all intransitive, and thus have absolutive subjects. Examples follow:⁶

- (7) *Pirəm thim-muwari yep-ji*
Piram house-ADES stand-PERF
 ‘Piram stood near the house.’
- (8) *mħun-chə nə yewta kalce bənnu tharo la-sirə*
night-LOC FOCUS one black gun vertical do-SEQ
 ‘at night a black gun stood erect, and . . .’ (R78)
- (9) *Ram kurci-phyaraŋ ci-i*
Ram chair-SUPER sit-PERF
 ‘Ram sat on the chair.’
- (10) *Om bħūy-ri terso ta-i*
Om ground-LOC horizontal become-PERF
 ‘Om lay on the ground.’

- (11) Om bñüy-ri tñan-ji
 Om ground-LOC hang-PERF
 ‘Om lay on the ground.’

There are no simplex verbs denoting transitive or causative counterparts of the basic expressions; that is, there are no simplex verbs with meanings analogous to English ‘stand smth. up’, ‘set’ (‘place in a sitting position’), or ‘lay’ (‘place in a lying position’). Causative counterparts can be formed, however, by either of two methods for making causative constructions in Chantyal. For native verbs, causative constructions are formed by placing the resultative suffix *-nə* on the semantic main verb and adding the auxiliary verb *la-* ‘do’:

- (12) Ram-sə nāni-ra yep-nə la-i
 Ram-ERG baby-DAT stand-RESLT do-PERF
 ‘Ram stood the baby up.’ (i.e. caused the baby to stand)

Note that this sentence has the expected ergative subject and dative-marked direct object.

Chantyal has borrowed a very large portion of its lexicon from Nepali, and verbs borrowed from Nepali often are found in intransitive/transitive pairs, unlike verbs in the native portion of the lexicon. The morphological marking for transitivity is based on the Nepali originals, but is manifested somewhat differently and in a rather simpler system than one finds in Nepali. As it happens, only one of the verbs in the set of basic posture expressions is borrowed from Nepali: *pəri-* ‘happen’, which has a transitive counterpart *pəri-* ‘cause to happen’.

- (13) Om-sə nāni-ra terso pari-i
 Om-ERG baby-DAT horizontal make.happen-PERF
 ‘Om lay the baby down.’ (i.e. caused the baby to become horizontal)

2.4. The semantics of posture expressions:

2.4.1. *Auxiliaries*

In Section 2.1, a set of basic expressions for referring to posture was presented. While there was only one (simplex) expression for ‘sit’, for ‘stand’ and ‘lie’ there were a number of periphrastic expressions formed with a set of three auxiliary verbs, *la-* ‘do’, *ta-* ‘become’, and *pəri-* ‘happen’.

la- ‘do’ is an active proverb which can substitute for any active verb, transitive or intransitive. It implies activity, so in (14):

- (14) Ram tharo la-i
 Ram vertical do-PERF
 ‘Ram stood.’

we assume that Ram actively maintained a standing position. When it is used with inanimate subjects, as in (8), repeated below,

- (8) mħun-chə nə yewta kalce bənnu tharo la-sirə
 night-LOC FOCUS one black gun vertical do-SEQ
 ‘at night a black gun stood erect, and . . .’ (R78)

the subject is presented as a volitional actor: in the story from which (8) is taken, the gun is standing before the narrator in a dream.

ta- ‘become’ is an active copular verb, implying a transition from one state to another. Its subjects may be animate or inanimate.

- (15) dəlɪŋ terso ta-si-m
 house.beam horizontal become-ANT-NPST
 ‘The housebeam lay horizontally.’

pəri- has a complex set of meanings in Chantyal and also in Nepali, from which the word was borrowed. The original sense in Nepali is ‘fall’; in Chantyal, the basic sense is ‘happen’. In posture expressions, it contributes the sense that the state of affairs thus described is the result of an event or events mentioned or alluded to earlier. Like *ta-* ‘become’, its subjects may be animate or inanimate.

- (16) dəlɪŋ əjəy terso pəri-m
 house.beam still horizontal happen-NPST
 ‘The housebeam is still horizontal.’ (i.e. still hasn’t been raised)

The contributions of these auxiliary verbs to posture expressions are summed up in (17):

- (17) *la-* implies activity on the part of the subject; animate subjects only
ta- active copular verb; implies transition between states; animate or inanimate subjects
pəri- resultant state; animate or inanimate subjects

These verbs are found in many other expressions; the orientational words associated with the verbs in (17) supply the meanings for the sense of posture expressions: *tharo* ‘vertical’, *terso* ‘horizontal, flat’, and *wattano* ‘supine’.

2.4.2. Agency and movement

Expressions denoting posture in Chantyal are divided between those which attribute agency to the subject and those which do not. For ‘stand’, the simplex verbs *yep-* ‘maintain a standing position’ and *yes-* ‘assume a standing position’ require an agent subject, as does the complex expression *tharo la-* ‘maintain a vertical position’. *tharo ta-* ‘assume a vertical position’ and *tharo pəri-* ‘come to be in a vertical position’, as noted earlier, do not require an agent subject. The basic

expression for 'sit', *ci-* 'sit', requires an agent subject. Of the expressions for 'lie', all of which are complex, those formed with *la-* 'do' require an agent subject and the rest do not.

In this way, Chantyal distinguishes between expressions which denote an active involvement on the part of the subject in the assumption or maintenance of a particular posture and those which simply express a specific vertical-horizontal orientation, the latter being available for animate or inanimate entities. For animate subjects, therefore, the speaker has a choice between framing the utterance so as to emphasize the subject's active involvement or framing it so as to background or even deny active involvement.

Another distinction which the Chantyal speaker must make in referring to posture is the distinction between the subject's assuming and maintaining a given posture. Expressions denoting 'stand' and 'lie' are so divided between those implying motion and those that do not, but *ci-* 'sit' is neutral in this regard, and in this way is like the English verb *sit*, which can also be used to refer to assuming or maintaining a sitting position.

Expressions for 'stand' and 'lie' can be displayed relative to the agency and motion as in (18):

(18) Expression	Standing/ lying	Agent subject	Assuming/maintaining position
<i>yep-</i>	standing	yes	maintaining (non-motional)
<i>yes-</i>	standing	yes	assuming (motional)
<i>tharo la-</i>	standing	yes	maintaining (non-motional)
<i>tharo ta-</i>	standing	no	assuming (motional)
<i>tharo pəri-</i>	standing	no	assuming (motional)
<i>terso la-</i>	lying	yes	maintaining (non-motional)
<i>terso ta-</i>	lying	no	assuming (motional)
<i>terso pəri-</i>	lying	no	assuming (motional)
<i>wattano la-</i>	lying	yes	maintaining (non-motional)
<i>wattano ta-</i>	lying	no	assuming (motional)
<i>wattano pəri-</i>	lying	no	assuming (motional)
<i>bhūy-ri than-</i>	lying	no	maintaining (non-motional)

It should be noted in passing that Chantyal has a set of motion verbs whose sense includes an invited inference that a lying or standing posture is achieved as a consequence of the motion, but which do not encode the posture directly or include the achievement of the posture as an entailment. For example, the verb *khiur-* means 'fall' or 'trip' and invites an inference that the subject is horizontally positioned, i.e. *terso*, as a result. The meaning does not entail this posture, however.

2.4.3. *Expression of location*

Posture expressions in Chantyal are not used idiomatically to express location. One does not find in Chantyal, therefore, idiomatic expressions analogous to the following English sentences:

- (19) The house stood on the edge of a cliff.
 The book sat on the table.
 The pieces lay on the floor.

In translating all of the above, a Chantyal speaker would use a simple locative expression involving a copular verb:

- (20) p̄hara-ye tawko-ri t̄him mu-ō
 mountain-GEN edge-LOC house be-IMPF
 ‘The house was/stood on the edge of a cliff.’

Indeed, posture expressions are used with inanimates mostly when a vertical or horizontal orientation is somehow basic to their definitions, and the sorts of mental scenes they invoke. So, a posture expression might appropriately have as a subject a housebeam or a tree, but not a watch or a book. And even then, it is only expressions denoting vertical or horizontal position, ‘stand’ and ‘lie’, which are potentially available for inanimates: the only dedicated basic expression for ‘sit’, *ci-*, can be used only with animates and only those for which reference to a sitting posture would make sense.

2.4.4. *Expression of manner*

Chantyal lacks simplex expressions which lexicalize *posture + manner* in verbs analogous to English ‘squat’, ‘crouch’, ‘lean’, and so on. Such expressions are always complex in Chantyal involving either an orientational word

- (21) ḡhowto p̄ari-wa
 prone happen-NOM
 ‘lean over, bend over, lie face down’

or an item in the “expressive vocabulary” (Noonan, to appear a):

- (22) kyata dhutummə ci-i
 boy sitting.upright sit-PERF
 ‘The boy sat upright.’
 (23) kyata cakre-makre la-si ci-i
 boy sit.cross.legged do-ANT sit-PERF
 ‘The boy sat cross legged.’

The lack of simplex verbs encoding *posture + manner* is consistent with the way

the expression of manner is handled generally in the language: manner is most frequently encoded by expressive vocabulary, often with *la-* ‘do’ functioning as an anterior converb, as illustrated by (22)–(23) above.

2.4.5. Polysemy of basic posture expressions

At various points in the preceding paragraphs we have noted ways in which the meanings of the basic posture expressions either overlap with other posture expressions or have senses that extend beyond the expression of posture. For example, the posture expressions containing *tharo* ‘vertical’, repeated below, are used to express ‘stand’: they can also be used to express ‘sit’, especially in reference to the assumption of a sitting posture from a ‘lie’ position:

- (24) *tharo la-* ‘maintain a vertical position’ (literally: ‘vertical do’)
tharo ta- ‘assume a vertical position’ (literally: ‘vertical become’)
tharo pari- ‘come to be in a vertical position’ (literally: ‘vertical happen’)

When the reference is to ‘sit’, *tharo* refers not to the entire body but only to the spine. All of the complex expressions can be used to encode a set of meanings based on a literal interpretation of their components.

Of the simplex verbs, *ci-* ‘sit’ is the only one to have extended its meaning much beyond the expression of a basic posture sense. *ci-* has acquired a range of meanings, including: sit, live (somewhere), be in a place, stay, remain, wait; continue; be (a member of a profession); seem. A few examples of these additional senses follow:

- (25) *yəwta gāw-ri yəwta bura ci-ma*
 one village-LOC one old.man sit-IMP
 ‘There was an old man who lived in a village.’ (P1)
- (26) *nhi Ram-ye yəwta them-əŋ ci-i*
 we Ram-GEN one house-LOC sit-PERF
 ‘We stayed in one of Ram’s houses.’
- (27) *shya-i ci-m*
 look-ANT sit-NPST
 ‘He’s staring.’
- (28) *cater nə kfi nə mastər ci-wa pari-m bfi-i*
 then FOCUS you FOCUS teacher sit-NOM happen-NPST say-PERF
 ‘“You have to be the teacher,” they said from that time on.’ (U103–4)
- (29) *māya kfi-ye hənuwar lū-i ci-si-m*
 love you-GEN appearance shine-ANT sit-ANT-NPST
 ‘(My) love, your appearance seems to shine.’ (AA82)

2.5. Grammaticalization of posture expressions

In the last section it was noted that *ci-* ‘sit’ had evolved a range of meanings, a few of which were illustrated in (25)–(29). We assume that the ‘sit’ meaning is an old one, and that the others derive from that sense by virtue of meaning extensions familiar from the histories of many languages. The ‘seem’ and ‘be (in a profession)’ senses are copular, extensions arising ultimately from the stative, durative senses of ‘sit’:

- (30) sit → stay → remain → be/seem

The ‘continue’ sense has a similar semantic origin, but with a somewhat different grammatical result, since here *ci-* assumes the status of an auxiliary:

- (31) kha la-i ca-wa ci-m-ē cu raches-sə
 how do-ANT eat-NOM sit-NPST-Q this ogre-ERG
 ‘How does he continue to eat them, this ogre?’ (AA90)

There is evidence that the copular verb *mu* derives historically from a verb meaning ‘sit, stay’. In Chantyal, *mu* is used for the expression of location and attribution; another stative copula, *hīn*, is used for identification.⁷ The locational sense in particular is expected in a copula deriving from a verb with a ‘sit, stay’ sense. Forms clearly cognate with *mu* are widespread in copular function in the Bodic Division of Tibeto-Burman. Where they have a meaning that is not simply copular, they mean ‘sit, stay’, as in Magar (see below).

The *mu* copula has developed into an auxiliary verb and a non-past suffix on verbs. In the latter function, it is suffixed directly to the verbal stem. It has two allomorphs, *-m* and *-mu*, the latter appearing in certain phonologically conditioned environments and optionally (but rarely) elsewhere.

- (32) na-sə sar-mu
 I-ERG kill-NPST
 ‘I’ll kill it.’ (P37)
- (33) əmrika-ne-ma-thōy la-si-rə ci-m
 America-person-PL-ESS do-ANT-SEQ sit-NPST
 ‘He sits down like an American.’
- (34) kfi nə bipətta ta-si-m
 you FOCUS terrible.STATE become-ANT-NPST
 ‘You’re in a terrible state.’ (L24)

As an auxiliary, *mu* is found in a number of constructions involving predictive, progressive, and resultative senses. A few examples follow:

- (35) na kam-ri tho-wa-bhānda pəyle, Ram kam la-wa mu
 I work-LOC arrive-NOM-COMP before Ram work do-NOM be.NPST
 ‘Even before I get to work, Ram will be working.’
- (36) tor them-əŋ kha-gəy mu-ō ro
 upward house-LOC bring-PROG be-IMPF report
 ‘(It was said that) he was bringing them up to the village.’ (M5)
- (37) yi-sər-wa sara-si-wa mu-ō nu
 this-manner-NOM swell-ANT-NOM be-IMPF reminder
 ‘It had swollen like this.’ (I85)
- (38) cə din nə bənnu nə bhərə-ysi-wa mu-wa hin-si-m
 that day FOCUS gun FOCUS fill-ANT-NOM be-NOM be-ANT-NPST
 ‘That day, it turned out that the gun was loaded.’ (R20)

The sense contributed by *mu* in such constructions, historically, was stativity and location within the time of an event.

3. Posture verbs in Magar

3.1. Introduction

According to the 1991 census of Nepal, there were 1,339,308 ethnic Magars, of whom only 430,264 (32.1%) spoke their ancestral tongue.⁸ Magar speakers can be found throughout central and west-central Nepal, but they are the dominant ethnic group in several districts: Rolpa, Pyutan, Baglung, Myagdi, Palpa, and Tanahu. Significant populations exist also in the Syangja and Kaski districts. The identification of Magars is complicated by the fact that a number of other ethnic groups, some speaking languages completely unrelated to Magar, have claimed to be Magars to outsiders. These groups include the Chantyal (as noted above), the Kham, the Kaike, the Kusunda, the Raute, and the Raji.⁹

While the Magar dialects listed in Figure 1 form a linguistic group and are clearly more closely related to each other than to any language outside their group, there is considerable linguistic diversity among them, even to the point where the dialects differ in the presence or absence of some major features defining different typological classes of languages in Nepal (Noonan 2000b).¹⁰ The dialects considered in this chapter fall into two groups, as shown in Figure 3.

All of the Magar dialects have been influenced to one degree or another by Indo-European Nepali, the national language. The eastern dialects, Tanahu and Gorkha in particular, have innovated considerably in the direction of Nepali,

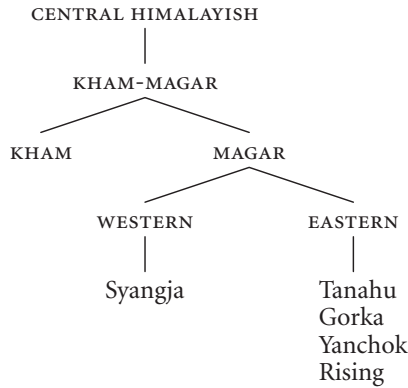


Figure 3. Proposed genetic relationships within Central Himalayish

whereas, Syangja has preserved more conservative features. The source dialect is indicated in the examples below.¹¹

3.2. Posture expressions in Magar

The Chantyal and Magar languages, though they are related and may have been spoken in close proximity at various times in their histories,¹² are very different in their treatment of posture expressions. In Section 2.2, we saw that Chantyal makes extensive use of complex expressions in referring to posture, having only a small set of simplex verbs with posture senses. In Magar, on the other hand, there are verbal roots with meanings referring either directly to posture or to motion up or down (rising or falling) which, in combination with a set of voice/transitivity (VT) suffixes, produce verbal stems which can be used to denote posture.

In general, the system works as follows:¹³ each verbal root forms at least two stems, one of which is causative. The other stem contains one of the other VT suffixes (transitive, intransitive, or middle) or is unmarked, as follows:

- (39) causative -(V)*k*-
transitive -(V)*t*-
intransitive -(V)*s*-
middle -(V)*ɦ*-¹⁴
unmarked -Ø-

The unmarked form can be transitive or intransitive in sense. No verbal root has all five theoretically possible stems. A few roots have four; many have three.

Verbal stems denoting ‘sit’ include the following:

(40)	Middle	Unmarked	Intrans.	Transitive	Causative
		<i>mu-</i>			<i>mu-ak</i>
		‘sit, stay’			‘cause to sit/stay’
	<i>ba-h-</i>		<i>ba-s-</i>	<i>ba-t-</i>	<i>ba-h-ak</i>
	‘settle down,		‘sit’	‘set down’	‘cause to settle down’
	alight’				<i>ba-s-ak</i>
					‘cause to sit’
					<i>ba-t-ak</i>
					‘cause to set down’

Verbal stems denoting ‘stand’ include the following set:

(41)	Middle	Unmarked	Intrans.	Transitive	Causative
	<i>so-h-</i>	<i>so-</i>		<i>so-t-</i>	<i>so-h-ak</i>
	‘swell up’	‘stand, rise,		‘stand	‘cause to swell’
		wake’		smth, raise,	
				awaken’	<i>so-k</i>
					‘cause to
					rise/wake’
					<i>so-t-ak</i>
					‘cause to raise/
					awaken’
	<i>toŋ-h-</i>				<i>toŋ-h-ok</i>
	‘be in a stand-				‘cause to
	ing position;				stand/stop/wait’
	stop, wait’		<i>thor-os</i>		<i>thor-os-ak</i>
			‘stand, rise’		‘cause to
					stand/rise’

Magar, like Chantyal, has no basic expression for ‘lie’, nor any complex expression whose only, or basic, sense is ‘lie’. What we find instead, as indicated in (42), are verbs whose basic sense is ‘flop down’, ‘collapse’ or ‘fall’. None of these denotes simply the basic position of ‘lie’; rather, these verbs describe an event which could result in the subject assuming a lying posture. The assumption of a lying posture is not stated directly, but left to inference.

(42)	Middle	Unmarked	Intrans.	Transitive	Causative
	<i>pol-ofi-</i>			<i>pol-ot-</i>	<i>pol-fi-ok</i>
	‘flop down,			‘put or lay	‘cause to fall down/
	collapse, lie			down’	collapse/lie; roll over’
	down’				<i>pol-ot-ak-</i>
					‘cause to put/lay down’
	<i>khori-fi-</i>				<i>khori-fi-ok</i>
	‘fall down, lie down’				‘cause to fall/lie’

The state of being in a ‘lie’ posture is expressed with a construction containing a nominalization of one of these verbs together with an auxiliary. The auxiliary is itself derived from the posture verb *mu-* ‘sit’ which in this construction functions as a resultative (Section 3.5).

- (43) *khor-fī-mə mu-*
 fall-MID-NOM sit
 ‘be in a lying posture’

In sum, we see that Magar, like Chantyal, maintains a distinction between expressions denoting ‘stand’ and ‘sit’, on the one hand, and ‘lie’ on the other. In both languages, there are expressions for ‘stand’ and ‘sit’ involving simplex verbs with primary senses denoting their respective postures. Expressions denoting ‘lie’, on the other hand, involve either complex expressions or simplex verbs referring to the lying posture only indirectly by inference.

3.3. The syntax of posture expressions

Magar is a morphologically ergative language. The dialects differ in that some are consistently ergative, like Chantyal, and some display split ergativity on the Nepali model. The western dialects, represented here by Syangja, are consistently ergative. The eastern dialects (Tanahu, Gorkha, Rising, and Yanchok) have an aspect-based split ergativity wherein perfective aspect correlates with ergative syntax and imperfective clauses with accusative syntax. The absolutive case is unmarked; the ergative is marked with the case clitic *i/e*.

In the western dialects, and in the eastern dialects in the perfective aspect, the absolutive is found with subjects of intransitive and middle stems, and the ergative is found with subjects of causative and transitive verbal stems:

- (44) *Middle*
 gandaki-aŋ mudhā pol-oh-a
 river-LOC log fell-MID-PST
 ‘The log lay/fell in the river.’
- (45) *Intransitive*
 Sita tebəl-aŋ ba-s-a
 Sita table-LOC stood-INTR-PST
 ‘Sita stood on the table.’
- (46) *Transitive*
 Manas-e biruwa jhā-ŋ so-t-a
 Manas-ERG sapling ground-LOC stood-TR-PAST
 ‘Manas stood the sapling on the ground.’

(47) *Causative*

Bhim-e mi-ja-ke ba-s-ak-a
 Bhim-ERG POSS-child-DAT sit-INTR-CAUS-PST
 'Bhim made the child sit down.'

With posture verbs, unmarked verbal stems are always intransitive and thus have absolutive subjects:

(48) *Unmarked*

Shrigana im-aŋ mu-a
 Shrigana house-LOC sit-PST
 'Shrigana sat in the house.'

(49) *Unmarked*

babu-ja galam-aŋ so-a
 boy-child door-LOC stand-PST
 'The boy stood at the door.'

The intransitivity of these verbs reflects the *Aktionsart* of these verbal roots: some unmarked verb stems are grammatically transitive.

Magar, like Chantyal, exhibits the anti-dative phenomenon, whereby direct objects high in animacy are marked in the dative case; other direct objects are absolutive, which is to say morphologically unmarked. (47) illustrates the marking of human direct objects. In (50), we have an example of a causative of a transitive, which shows that the subordinated agent is rendered in the dative case:

- (50) Sita-e Bhim-ke mi-ja-ke ba-t-ak-a
 Sita-ERG Bhim-DAT POSS-child-DAT sit-TR-CAUS-PST
 'Sita made Bhim set down the child.'

3.4. The semantics of posture expressions

3.4.1. *Transitivity and voice*

We had earlier discussed how, in referring to posture, Chantyal speakers must, on the one hand, distinguish between expressions which attribute agency to the subject and those which do not; and, on the other hand, they must distinguish between those expressions which denote the assumption of a given posture and those which denote the maintenance of one. Neither of these distinctions, so fundamental to the Chantyal mode of referring to posture, is encoded syntactically or morphologically in Magar.

However, as noted, Magar employs an elaborated system of voice and transitivity marking that has no analog in Chantyal. At one stage in the history of Magar, this system would have been fully productive. Benedict (1972) reconstructs

**t* and **s* stem-finals for Proto-Tibeto-Burman with meanings — directive/causative and reflexive/middle, respectively — that show that the Magar system is a continuation of a Proto-TB transitivity marking system. At this stage in the history of the language, however, only the causative is fully productive: every verbal stem (transitive, intransitive, middle, or unmarked) has a causative counterpart, as (40)–(42) attest. However, the distribution of the other verbal stem-types indicates that these forms are fully lexicalized and are not derived by morphological processes. From a purely synchronic perspective, it is not possible to predict for these posture expressions why certain theoretically possible VT stems are not found. So, for example, for verb roots referring to ‘sit’, we have only an unmarked form for *mu-*, along with the inevitable causative, while for *ba-*, we have a middle, an intransitive, and a transitive (and corresponding causatives), but no unmarked form. Unmarked *mu-* and morphologically intransitive *ba-s-* are more-or-less synonymous. For ‘stand’, we have morphologically unmarked *so-* paired with transitive *so-t-*, alongside an unpaired, morphologically intransitive *thor-os-* and a middle (and unpaired) *toj-fi-*. While we could not predict from the meanings of the verbal roots how the stem forms would be distributed among them, it is nonetheless remarkable that, with the predictable exception of the causatives, we have for both ‘sit’ and ‘stand’ full paradigms of verbal stems distributed among the various roots. So, for ‘sit’, we have

- | | | | | |
|------|---------------|------------|--------------|--------------|
| (51) | middle | unmarked | intrans. | transitive |
| | <i>ba-fi-</i> | <i>mu-</i> | <i>ba-s-</i> | <i>ba-t-</i> |

and for ‘stand’, we have:

- | | | | | |
|------|----------------|------------|-----------------|--------------|
| (52) | middle | unmarked | intrans. | transitive |
| | <i>toj-fi-</i> | <i>so-</i> | <i>thor-os-</i> | <i>so-t-</i> |

(Recall that *so-fi-* ‘swell up’ has a deviant meaning.) This is likely just a coincidence since similar patterns are not regularly found among other groups of nearly synonymous verbs, but it is a curious fact.

Despite the fact that the VT stems are fully lexicalized, there is a high degree of predictability in their meanings given the sense of the root and meanings of the VT suffixes: stems marked with the transitive suffix *-(V)t-* are unfailingly transitive and preserve the basic meaning of the stem very well. Similarly, those marked with the intransitive suffix *-(V)s-* are unfailingly intransitive and likewise preserve the basic meaning. The exceptions, not surprisingly, are the middles, which show the greatest degree of semantic drift: *ba-fi-* ‘settle down, alight’ (from *ba-* ‘sit’) and *so-fi-* ‘swell up’ (from *so-* ‘stand, rise’) and have extended meanings, with the result that the latter has ceased to be a posture verb, though its relation to the other members of the *so-* stem set is still discernable. Similarly, *toj-fi-* ‘be in a standing position’ has the additional meaning ‘stop’.¹⁵

3.4.2. *Expression of location*

Unlike Chantyal, some posture verbs in Magar can be used to indicate location. In (53), we see intransitive *ba-s-* ‘sit’ used with an inanimate subject to indicate location:

- (53) *khwa* *bhiṭr-aŋ* *handa* *ba-s-le*
 small.clay.pot inside-LOC large.clay.pot sit-INTR-IMPF
 ‘The *khwa* (small clay pot) sits inside the *handa* (large clay pot).’ (T)

In (54), we find the causative of *ba-s-* used in a similar way:

- (54) *ho-t-iŋ* *karaŋ* *ra-k-le,* *kara-ŋ*
 D.DEM-PROX-ABL bamboo.basket bring-CAUS-IMPF bamboo.basket-LOC
moca *lŋa tan-le,* *ra* *ho-lak-aŋ* *ba-s-ak* *ka-le*
 banana leaf stretch-IMPF and D.DEM-CIR-LOC sit-INTR-CAUS put-IMPF
 ‘Afterwards we bring a bamboo basket, stretch a banana leaf over it and make it sit there.’ (T)

Likewise, unmarked *mu-* ‘sit’ has evolved a meaning ‘stay’, which can be used to indicate location:

- (55) *kus-kat* *kitab a-l-aŋ* *mu-a*
 which-one book R.DEM-CIR-LOC sit-PST
 ‘Which of the books over there stays?’ (S)

Verbs expressing the standing posture are not used to indicate location and locative expressions formed with the copular verb are used instead.

The expression of the lying posture is rendered by verbs whose basic sense means ‘fall down’. These verbs can take animate or inanimate subjects, but are not used in the expression of location in ways analogous to English *lie*.

3.4.3. *Expression of manner*

It is almost certainly an areal feature of the Tibeto-Burman languages of Nepal that they do not lexicalize *posture + manner* in ways analogous to English ‘squat’, ‘crouch’, ‘lean’, etc. As noted in Section 2.4.4, Chantyal does not have verbs of this sort, and neither does Magar. In Magar, adverbial expressions of various sorts are used to supply information about manner.

- (56) *tokorok mu-*
 straight sit
 ‘sit straight’ (S)
- (57) *bŋa-t-alas* *mu-*
 separate-TR-ADV sit
 ‘sit cross-legged’ (T)

Most likely, the fact that *posture + manner* is not lexicalized in Chantyal and Magar is related to the limited use of posture verbs in the expression of location — recall that posture expressions are not used idiomatically to express location in Chantyal, and only the verb *ba-* ‘sit’ has this use in Magar. In using a posture verb-based metaphor for the expression of location, a speaker is invoking an image suggesting the manner in which the subject is situated in space. By saying *Milwaukee lies west of Lake Michigan*, we create an image of the town arranged in space in a certain manner. Since these Tibeto-Burman languages rarely conflate verbal and manner senses into a single lexical item, they are less likely to use posture verbs for the expression of location, compared with languages which conflate verbal and manner senses more regularly.

3.4.4. Polysemy of basic posture expressions

When introducing the posture verbs in (40)–(42), we noted the range of meanings that these verbs possessed. For the most part, these meaning extensions are familiar ones. Focusing here on expressions for ‘sit’ and ‘stand’, since it is only with these verbs that we have dedicated postural meanings, the following instances of polysemy were noted in (40) and (41):

- (58) *mu-* : sit → stay
ba- : sit → settle down, alight
so- : stand/rise → swell up
so- : stand/rise → wake
toŋ- : stand → stop/wait

Note also that with *so-* and *thor-*, we have verbs which mean both ‘stand’ and ‘rise’.

Additional instances of meaning shift have been noted. For example, transitive *ba-t-* ‘set down’ can also mean, given the appropriate context, ‘stop or ‘desist’ in an activity:

- (59) Bhim-e kajus-cə-ko-ke kajus-ke ba-t-ak-ke
 Bhim-ERG work-ATT-PL-DAT work-NOM sit-TR-CAUS-NOM
 Manas-ke birhin-a
 Manas-DAT send-PST
 ‘Bhim sent Manas to make the workers stop their work.’ (S)

The same verb compounded with *mhiuŋ* ‘tiredness’ has the meaning ‘rest’:

- (60) hose-ko pahar-aŋ kalfi-a curcur-aŋ tak-dək-iŋ
 D.DEM-PL rock.face-LOC climb-PST peak-LOC reach-COTEMP-ABL
 mhiuŋ-ba-t-a
 tire-sit-TR-PST
 ‘They climbed the rock face, and having reached the peak, they rested.’ (S)

mu- has extended its meaning beyond ‘sit, stay’ to ‘live at/in’:

- (61) hose mahja i-l-aŋ som lhes-iŋ ho-ra
 D.DEM woman P.DEM-CIR-LOC three year-ABL D.DEM-QUANT
 mu-mə-le
 sit-NOM-IMPF
 ‘That woman has lived here for three years.’ (T)

- (62) hos-ko jum-cyo sah-aŋ sahər-aŋ ŋu-le¹⁶
 D.DEM-PL cold-ATT season-LOC city-LOC sit-IMPF
 ‘They live in the city in the cold season.’ (T)

mu- is also found in verb concatenation constructions, some of which have lexicalized meanings, as in the following example:

- (63) Ram-e kagat la-fi-ak-ke kagat-aŋ me-cop mu
 Ram-ERG paper take-MID-CAUS-NOM paper-LOC POSS-pitch sit
 la-a
 take-PST
 ‘Ram put pitch on the paper to cause the paper to stick together.’ (S)

The verb concatenation *mu la-* (literally: ‘sit-take’) means ‘put on’.

3.5. Grammaticalization of posture expressions

It was noted in Section 2.5, that the Chantyal copular verb *mu* derives from a verb meaning ‘sit, stay’. Traces of its origins in a posture verb can be found in the fact that, in opposition to the other copular verb *hin*, *mu* is used in locational expressions as opposed to identificational ones, to which *hin* is now restricted.

As it turns out, Magar *mu-* ‘sit, stay’ is cognate with Chantyal *mu*. And just as with its Chantyal counterpart, Magar *mu-* has followed an evolutionary path toward purely grammatical meanings. The main grammatical use to which Magar *mu-* is put is the expression of durative aspect. This use can be seen in the following three examples:

- (64) hose mis-mə mu-me
 D.DEM sleep-NOM sit-PRPF
 ‘She is still sleeping.’ or ‘She has been sleeping.’ (T)
- (65) mi-ja-ja kur-fu-mə mu-le
 POSS-child-child fall-MID-NOM sit-IMPF
 ‘The child is lying down.’ (T)

- (66) ka-yak babu-ja ra cyu mis-mə ɲu-naŋ rokotyak sisi-iŋ
 one-day boy-child and dog sleep-NOM sit-SIM frog bottle-ABL
 bahire khyo-f-mo nu-a-aŋ
 outside emerge-MID-SEQ go-PST-LOC
 ‘One day while the boy and the dog were sleeping, the frog came out
 from inside the bottle.’ (T)

The semantic main verb is nominalized in durative constructions and *mu-* appears as an auxiliary. The sense contributed by *mu-* in these constructions is location within the time of an event and derives from the ‘stay, remain’ senses that *mu-* has developed.

4. Summary

Despite the fact that Chantyal and Magar are related languages, have almost certainly been spoken in close proximity during the last few centuries, and are subject to the same areal influences (see Noonan, to appear b), they show numerous differences in the ways in which posture verb expressions are formed and organized within the grammar. In sum:

- Chantyal makes extensive use of complex expressions in referring to posture, having only a small set of simplex verbs with posture senses. In contrast, Magar has a relatively large number of verbs referring to the sitting and standing postures: these verbs are formed by combining the verbal root with any of a number of voice/transitivity affixes.
- However, for the lying posture, both languages employ complex expressions or simplex verbs which refer to the lying posture only indirectly by inference: neither has dedicated verbs denoting this posture.
- Chantyal speakers must, on the one hand, distinguish between expressions which attribute agency to the subject and those which do not; and, on the other hand, speakers must distinguish between expressions which denote the assumption of a given posture and those which denote the maintenance of one. Neither distinction is made in Magar.
- Neither language has simplex verbs which combine *posture + manner*.
- In Chantyal, expressions denoting posture are not used idiomatically to express location. In Magar, only one verb can be used idiomatically for the expression of location.
- In Chantyal, the few verbs with dedicated postural senses have not, with one exception, extended their meanings beyond postural senses. In contrast, postural verbs in Magar commonly exhibit extended meanings.
- In both languages, the verb *mu-* has acquired purely grammatical functions.

Abbreviations

ABL=ablative; ADES=adessive case; ADV=adverbial; ANT=anterior; ATT=Attributive; CAUS=causative; CIR=circumlative; COMP=comparative case; DAT=dative case; D.DEM=distal demonstrative; ERG=ergative case; ESS=essive case; FOCUS=focus/topic particle; G=Gorkha; GEN=genitive case; IMPF=imperfective; INTR=intransitive; LOC=locative case; MID=middle; NOM=nominalizer; NPST=non-past; P.DEM=proximal demonstrative; PERF=perfective; PL=plural; POSS=inherent possession; PPRF=past perfective; PRPF=present perfect; PROG=progressive converb; QUANT=quantifier particle; R=Rising; R.DEM=remote demonstrative; S=Syangja; SEQ=sequential converb; SIM=simultaneous converb; SUPER=superessive case; T=Tanahu; TR=transitive; VT=transitive verb; Y=Yanchok.

Notes

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1. The figures given here are estimates, arrived at in consultation with ethnic Chantyls. In the last official census in 1991, the Chantyal were not an officially recognized ethnic group/caste and were not separately counted.
2. See Noonan (1996) for a discussion of this question and for general ethnographic information. See Noonan (to appear a) and Noonan *et al.* (1999) and references given there for additional information about the Chantyal and their language.
3. The expressions in (2) can be used in reference to sitting, the “vertical” sense contributed by *tharo* referring here to the spine and not the entire body. However, without supporting context, these expressions refer to standing.
4. It should be noted that there is an additional set of expressions with *ghowto* ‘prone’ which can also translate English *lie*.

- (i) *ghowto la-* ‘maintain a prone position’ (literally: ‘prone do’)
ghowto ta- ‘assume a prone position’ (literally: ‘prone become’)
ghowto pəri- ‘come to be in a prone position’ (literally: ‘prone happen’)

The expressions in (5) involving *wattano* ‘supine’ differ from those with *ghowto* ‘prone’ with reference to the orientation of the face; they also differ in that those with *wattano* strongly imply (but do not entail) that the subject is in a lying position, whereas those with *ghowto* do not and have a range of meanings which includes ‘stoop’, ‘bend down’, ‘crouch down’ as well as ‘lie face down’. This difference between *wattano* and *ghowto* rests on the practical possibilities of human postures: to have one’s face pointing upward and one’s backside downward (‘supine’) implies a lying posture, whereas having one’s face pointing downward and one’s backside up is a posture that can be easily achieved without lying down. It is for this reason that the expressions with *wattano* are included among the basic expressions for posture in Chantyal (and are the forms usually given by Chantyls as translations of English *lie*), whereas those with *ghowto* are not included in the basic set.

5. Chantyal exhibits the ‘antidative’ phenomenon: see Dryer (1986), Noonan (1991), and Noonan (to appear a) for discussion.
6. References in parenthesis, e.g. (R78), refer to numbered clauses in discourses published in Noonan *et al.* (1999), Noonan and Bhulanja (to appear c), and Noonan and Bhulanja (in preparation).
7. *mu* is the unmarked copula and is occasionally found in identificational sentences, especially if a locative noun is present, as in *He was a student in Kathmandu*.
8. The figures are reported in Gurung (1998).
9. Among the reasons for this were the fact that Magars were officially unenslavable and the fact that they were one of the groups recruited by the British for enrollment in the Gurkha units of the British army.
10. Most notable among these features are consistent ergativity and a more complex verb agreement system which resembles that of the Kiranti languages.
11. Tanahu (T), Syangja (S), Gorkha (G), Rising (R), Yanchok (Y). Data from the Yanchok dialect are from Shepherd and Shepherd (1971, 1972, 1973). Data from the Rising dialect are from Subba (1972). Transcriptions have been systematized. Data from the other Magar dialects and from Chantyal were collected by the authors.
12. In parts of the Chantyal-speaking area, Chantyls and Magars share the same slopes, with the Chantyls living at the higher elevations and the Magars on the lower. However, in these Magars speak the national language, Nepali, and we know that they have spoken Nepali for a number of generations, perhaps as long as the Chantyal have inhabited the area they now share. See Noonan (1996) for a discussion of some of these issues. There appears to be, however, an early layer of Magar borrowings in Chantyal, which suggests that the two languages were once spoken in close proximity. Population movements have been frequent in Nepal and it is known that the Chantyls migrated to their current homeland within the last two centuries.
13. See Grunow-Hårsta (to appear) for discussion.
14. *-fi-* may represent phonetic murmur which extends over adjacent segments; it may also represent (h). We choose to represent this morpheme by *fi* so as not to confuse the morpheme with phonetic aspiration represented by *h*.
15. See Heine *et al.* 1991 for discussion of the susceptibility of middles to meaning changes of this sort.
16. *ŋu-* is a variant of *mu-* found in the Tanahu dialect.

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CHAPTER 6

The semantic network of Dutch posture verbs*

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1. Positioning the problem

Recently, the linguistic community has witnessed a (renewed) interest in the use and semantics of posture verbs. As for many other linguists, so also for me, it was foreign language teaching (Dutch to French speakers) that made me realize how ‘exotic’ Dutch must be from a French perspective in its use of posture verbs. To my students, the correct use of the Dutch posture verbs *zitten* ‘sit’, *staan* ‘stand’, and *liggen* ‘lie’ is often guess work in which they are often misled by the dimensions of verticality and horizontality that the situated objects have in the real world. Indeed, Dutch uses posture verbs to code cases where the referent’s ontological dimensions seem to conflict with the dimension intuitively associated with the posture verb, as in the following cases:¹

- (1) Het bord staat op de tafel.
‘The plate stands on the table.’
- (2) Het appartementsgebouw ligt op de hoek.
‘The apartment building lies on the corner.’
- (3) Er zit water in de fles.
‘There sits water in the bottle.’

Plates are saliently horizontal in orientation yet in Dutch they are normally coded as standing rather than lying. Conversely, a building has a salient vertical extension, yet can in many contexts be said to be lying. Water is conceptualized as ‘sitting’ in the bottle, but as ‘lying’ on the floor or ‘standing’ in the cellar. Franco-phone learners of Dutch are faced with two (for them difficult) choices: first, they have to train themselves to use a posture verb rather than a general verb (such as *être* ‘to be’ or *se trouver* ‘be found’) and secondly, they are confronted with the

choice of posture verb itself which, as illustrated above, is not intuitively straightforward to them either.

The present chapter is an attempt at providing a more refined description of the semantic network of Dutch posture verbs. The main focus is on *locational* expressions that situate an entity in physical space, but occasionally attention will be drawn to some metaphorical extensions as well, i.e. those usages that are no longer characterized relative to the spatial domain. My analysis presents a cognitively inspired approach, sketching the polysemic network for the different verbs, and drawing attention to the internal coherence and motivation of the different uses. It draws on some valuable contributions that have appeared on the subject, but elaborates them, and departs from them, in a number of ways.²

The article is structured as follows. After a short sketch of the anthropocentric prototypes (Section 2), we will start with *zitten*, the verb least committed to posture (Section 3) to move on to *staan* and *liggen*, the two verbs most saliently marked for posture and orientation (Section 4). Some basic coding alternations will be discussed in Section 5. The concluding section will briefly consider the use of posture verbs vis-à-vis more general verbs (e.g., *zijn* ‘to be’) and situate the posture verbs in a larger typological framework.

Apart from material from dictionaries, other publications, and my own intuition, the bulk of the material considered for analysis comes from a large collection of contemporary (Belgian) Dutch non-fictional prose, taken from magazines. It comprises various types of text (articles, interviews, letters to the editor, etc.) on a wide variety of topics (economy, politics, tourism, film, literature, architecture, etc.). In total, 9971 sentences have been extracted: 1320 for *liggen*, 4340 for *staan* and 4311 for *zitten*. All have been considered; for each verb, 500 attestations were randomly selected and codes were added in order to carry out some elementary statistical analyses. The analysis presented in this article will explain why *zitten* and *staan* are so much more frequent than *liggen* (3.3 to 1). Corpus examples have not been systematically marked as such (although often they will be quite recognizable). In some cases, they have been simplified to enhance readability and the spelling has been adapted to the recent spelling reform.

2. Posture prototypes

Most studies agree on the anthropocentric basis of the posture verbs: their prototypical meaning pertains to the three typical positions of a human being. Van Oosten furthermore points out that “for a human being, it seems that the canonical position — the normal position, all other things being equal — is upright, standing” (1984: 144). This idea of canonical position will prove relevant in understanding some of the (productive) extensions of Dutch *staan*. Two other

characteristics that Van Oosten considers important for *staan* are (1) standing humans are higher than they are wide, and (2) they are able of their own accord to maintain this position. Newman (this volume) makes a similar observation for sensorimotor control. The idea that standing is strongly related to the notions of balance and control has been argued for by Gibbs *et al.* (1994). As such, *liggen* 'lie' codes a situation maximally opposed to that expressed by *staan*: (1) the human being is not in the canonical position, (2) it is longer than it is high, and (3) there is absence of sensorimotor control. One could thus argue, as does Serra Borneto (1996), that lying and standing are the two basic locative relations, for which the notions of verticality and horizontality are central. *Zitten*, then, can be regarded as the case in between: partly horizontal, partly vertical and the sensorimotor control is less than for standing but more than for lying. Simplistically put, then, *zitten* codes a position that is neither standing nor lying. As Van Oosten aptly puts it: "the best way to deal with that is to *ignore orientation*" (1984:144, my *emph.*). This view will prove helpful to understand major extensions of *zitten* discussed later in this section.

The analysis in terms of an orientational 'cline' *staan–zitten–liggen* is nicely illustrated by the variations in human body position that each verb allows. Given that *staan* and *liggen* encode the most clear-cut cases of orientation, the variation they tolerate is minimal. For *staan*, the only true variant accepted seems to be that of a human being standing on the head or hands, a variant which entails an up-down reversal but preserves (maximal) verticality. For *liggen*, the variation pertains to which of the four body sides one lies on; also here, this entails a minimal variation which preserves the maximally horizontal orientation. Notice that for both verbs, the standard motion is the same for all variations: for the two variants of *staan*, this is *lopen* 'walk'; for the four variants of *liggen*, this is *rollen* 'roll' or *schuiven* 'slide'. Some other deviation of posture may occasionally be tolerated, such as standing with bent torso, but this is treated as a non-prototypical case, where the main orientation remains salient even when not preserved for the whole extension of the body.

The case is quite different for *zitten*. The absence of orientational commitment triggers variation of a much more extreme kind compared to that accepted for *staan* and *liggen*. Dutch uses *zitten* to refer to a human being in a diversity of positions: (i) resting on the buttocks (on a chair, or with the legs crossed (yoga-position), or with legs stretched out); (ii) a squatting position; (iii) on all fours; (iv) on hands and knees; or (v) on one's knees.³ Given this variation, the simplified analysis of *zitten* as being the negation of *staan* and *liggen* is not altogether useless. But of course, *zitten* is more than that. What appears to be important alongside the orientational variation is that *zitten* mostly codes a situation where certain (smaller) parts of the body other than the feet (buttocks, knees, etc.) are in (close) contact with the supporting base (chair, table, floor, etc.). The idea of

being stuck, and thus being passive or unable to move or get out, has become a crucial feature of Dutch *zitten* which, as we will show, motivates some typical and highly productive extensions of the verb.

One could reasonably argue that the lower level distinction for *liggen* is redundant, since the verb could be said to be vague rather than polysemous with respect to the variations (i) to (iv). This is not the place to engage in the discussion on vagueness versus polysemy (see Lemmens 1998, 2001a), but since the semantic variation of the posture verbs is at issue here, it is important to observe the generalization inherent to the linguistic coding.⁴ Of the different variants, lying on one's back is probably the most salient one, but this seems not crucial to our discussion here. However, the "contextual accommodation" to use Langacker's term (Langacker 1987:75) becomes more obvious with *zitten*, as the ontological variation is more outspoken here. In order to cover all the different body positions, the encompassing definition has to be more schematic with respect to these variants that can all felicitously be referred to by *zitten*. This does not mean that Dutch speakers cannot distinguish between the different positions — they can, of course, but at the same time, they see something in common as well, leading them to unite these uses in the same semantic category. Other languages clearly have different groupings.

Dutch has extended the semantic coverage of the three posture verbs to a considerable degree, applying the verbs to various locational expressions, contexts where one 'locates' animals, inanimate objects, and abstract entities, which obviously implies that some of the attributes of the prototypes will be cancelled out. Using the metaphor of the network representation, the larger the elaborative distance from the prototype, the less the perceived similarity. In those cases, the individual meanings will themselves be more salient than the uniting schema, which would be in line with how one traditionally regards cases of polysemy.

While the conceptual prototypes for the three posture verbs are intuitively straightforward, we can add that their centrality does not emerge statistically from our corpus. Of a total of 1500 sentences, only 10 to 15% refer to the prototype. This does not invalidate their prototypical status (of which frequency is only one exponent), but it does show the rich metaphorical coverage of the verbs. A possible explanation for the unexpected low occurrence may lie in the type of corpus and the topics of the texts. Presumably, narrative descriptions would have more prototypical and/or locational expressions.

3. Basic non-posture: the case of *zitten*

Cognitive grammar explains extensions from the prototype to other contexts drawing on the notion of *image schemas*, patterns of bodily experience, that

“emerge throughout sensorimotor activity as we manipulate objects, orient ourselves spatially and temporally, and direct our perceptual focus for various purposes” (Gibbs *et al.* 1994:233).⁵ For posture verbs, this means that some similarity is perceived between human posture and that of many other entities, both concrete and abstract. One such similarity-based extension occurring in nearly all languages is that of humans to animals. As for posture verbs in Dutch, this may be a good starting point, leading, ironically perhaps, to a better understanding of the semantics of *zitten*.

Quadrupeds can occupy postures that Dutch speakers perceive as sufficiently similar to those of humans. Thus, *staan* is used when cats, dogs, cows or elephants rest on their feet; *zitten*, when their hindlegs are bent and they rest on the part perceived as their ‘behind’; and *liggen*, when they rest on one of their sides, mostly with all four legs bent. However, there are some interesting conventionalized differences, as also pointed out by Van den Toorn (1972). The ‘sitting’ position of (bigger) quadrupeds like cows or horses seems not to be so relevant, since it is hardly ever profiled. The most typical position for cattle is that of standing, and so *staan* is most commonly used, even in cases where not all the animals are standing (e.g., *de koeien staan op stal* ‘the cows stand in the cowhouse’). Conversely, other quadrupeds like cats and dogs, which in principle can be coded with *staan*, are mostly coded with *zitten*, e.g., *de hond zit in de woonkamer* ‘the dog sits in the living room’. The distance between trunk and ground is important here, presumably strengthened by cultural significance: cattle and horses are most useful to humans when standing (think only of the milking of cows and the riding of horses).⁶ Strangely enough, an utterance like *het huis staat vol katten* ‘the house stands full of cats’ has the strong implication that the house is full of *statues* of cats (maybe in a sitting position) rather than real ones on their feet (cf. Sections 4 and 5.1).

The common use of *zitten* in these contexts is related to *zitten* being used for other animals as well. A case in point are smaller quadrupeds, like rabbits, mice, or frogs. They, too, rest on their feet, but their hindlegs are bent and their ‘behind’, if any is perceived, is close to the ground (and so is the rest of their body). Their typical body posture is sufficiently similar to that of humans squatting, where the legs are bent and the body close to the ground, a posture coded in Dutch with *zitten*.⁷ Notice that when imitating any of these animals, people will typically squat. Even when these small animals are in an elevated position, Dutch still prefers a coding like *de muis zat rechtop*, literally “the mouse sat straight-up”, the ‘behind’ still being close to the ground and the hindlegs not stretched. Birds, while resting on their feet, are also always coded with *zitten*, because they are also in a posture perceived as similar to squatting. However, ostriches and flamingos (and other stilt-birds), having an atypical posture for birds, i.e. high on their stretched legs, are typically coded with *staan*. Insects and limbless animals are typically coded with *zitten*:

- (4) Er zat een vlieg op het plafond/een slang in het gras/een vis in het aquarium.

‘There sat a fly on the ceiling/a snake in the grass/a fish in the fish tank.’

In the case of snakes, *liggen* can be used to refer to them being rolled up, for example.

In short, Dutch uses *zitten* to code the canonical position for animals when either the hindlegs are bent or the animals trunk is close to the ground, or both.⁸ The use of *zitten* in these contexts strengthens the verb’s non-commitment to postural differentiation. All these animals can also be in a position coded as *liggen* when in a non-canonical position, e.g., when dead.

But there is more to this use of *zitten*, which aligns it with other productive uses of the verb. Let us reconsider some cases where *zitten* can be used for quadrupeds and humans.

- (5) a. Vanmorgen zat er een hond in mijn klaslokaal.
 ‘This morning there sat a dog in my classroom.’
 b. De kat zit weer op tafel.
 ‘The cat sits on the table again.’
 c. Hij ligt/zit in bed.
 ‘He lies/sits in bed.’

All of these cases may refer to cases where the posture is *not* that of sitting. The alternation in the last sentence is revealing: *liggen* explicitly encodes the person’s posture, whereas *zitten* does not, it simply situates him in the bed. If one explicitly and unambiguously wants to profile him being in a sitting position, it is better to say *hij zit rechtop in bed* ‘he sits straightup in bed’. Moreover, if I say *hij zat op het bed* ‘he sat *on* the bed’ the person is unambiguously coded as being in a sitting position.⁹

Crucial to the ‘non-postural’ use of *zitten* is the relationship between the referent and its location, or in more technical terms, the figure/ground alignment. For non-postural *zitten*, what is retained is that the figure is either *closely contained by* or in *close contact with* the ground. I will refer to these uses as *CONTAINMENT-zitten* and *CONTACT-zitten*, respectively. Reconsidering in this perspective the case of snakes in the grass or fish in the water, one can say that *zitten* is indeed non-specific for posture and merely situates the figure within the ground. So, even though elephants can definitely be perceived as standing, as in *er stond plots een olifant voor me* ‘there stood suddenly an elephant in front of me’, when the focus is on elephants “being around”, one typically says *er zitten hier geen olifanten* ‘there sit no elephants here’. This utterance does not commit itself to any position but to containment. A sentence like *er zat een vlieg op de tafel en één in mijn soep* ‘there sat a fly on the table and one in my soup’ brings together two different meanings of *zitten*, i.e. “bug on its feet close to the ground” and “bug contained

in liquid”, but the meanings are sufficiently compatible to be combined in an elliptical construction without giving rise to a zeugma.¹⁰ If one replaces *zitten* with *liggen*, the difference disappears, as the fly would in both cases be in the same, lying position.

The origin of the concepts CONTAINMENT and CONTACT derives from proto-typical *zitten* via two mechanisms. First, when sitting in an arm-chair or an easy chair, there is close contact and partial containment (as also indicated by the use of *in* rather than *on*). The following corpus examples nicely illustrate the point:

- (6) a. Ik zit in een rolstoel.
‘I sit in a wheel chair.’
- b. Tegen drieën zit de tent nokvol.
‘By three (o’clock) sits the joint chockfull.’

In (6a), a sitting position is referred to but in the context of this sentence the speaker’s focus is not really on this posture but rather on explaining the constraints that being in a wheel chair implies. In (6b), the bar is full of people, who typically sit down, but that seems not to be the primary focus of this construction. Rather, it is the idea that the place is completely filled.¹¹ This example illustrates the second, and probably more important, ground for the extension to containment, *viz.* the metonymical shift from the immediate supporting ground to the larger enclosing space. When you say *ik zit in de auto* ‘I sit in the car’, the profile leaves out the seat on which you actually sit. As in the examples above, this sentence activates both the concept of sitting and that of containment but renders the latter more salient by profiling the larger container.

CONTAINMENT-*zitten* is immensely productive and can apply to any object perceived as being in close containment. In our corpus, almost 50% of the attestations with *zitten* pertain to real or metaphorical containment. Here are some locational expressions from our corpus:

- (7) a. Een chauffeur zag een kind tot aan zijn voeten in de container zitten.
‘A driver saw a child sitting up to its feet in the container.’
- b. In de zandbanken zitten scholen pijlstaartroggen.
‘In the sandbanks sit schools of sting-rays.’
- c. [. . .] of het stuk nu in de kast zit.
[. . .] ‘whether the document sits in the closet.’
- d. [. . .] als er te weinig wapening in het beton zit.
[. . .] ‘if there sits too little reinforcement in the concrete.’

All these examples locate one entity within the confines of another. Van Oosten (1984:146) makes the following observation for similar cases: “it turns out that when objects are located in enclosed spaces, especially ones that can themselves

change their orientation, *zitten* is the verb of choice". While essentially correct, her analysis needs to be nuanced in a number of ways.

First, she seems to underestimate the range of CONTAINMENT-*zitten*, as it applies to other of her examples as well, for which she, however, does not follow this analysis. Secondly, my data shows that the container very often is not of the type that changes its orientation, as also in the examples above. Clearly, in the case of close containment (e.g., CDs in their case, money in my pocket, etc.), the position of the contained necessarily follows from that of the container. This may be related to the prototype of sitting, where the shape of the body is largely determined by the shape of the (easy) chair. What seems to be more important than the 'movability' of the container, however, is the idea of being closely contained. The weaker the closeness of containment, the more likely that the position of the figure will become more prominent, which is especially true when the figure itself has a typical position within the container.¹² Variation is thus bound to occur, an issue to which we will return shortly. Thirdly, as to the motivation for this usage, Van Oosten says: "there is no clear orientation, there is no clear canonicity, but there is some rigidity" (1984:146–7). Particularly the latter is too strict, as partial rigidity (retained from the prototype) is not really an issue in this usage, since it applies equally well to fluids or other saliently *non-rigid* substances in a container (or dissolved in them), illustrated by the following examples:

- (8) a. Er zit geen bier meer in het vat.
'There sits no more beer in the barrel.'
- b. Hoeveel zand zit er in één zak?
'How much sand sits there in one bag?'
- c. Er zit suiker in mijn koffie.
'There sits sugar in my coffee.'

Another complicating factor (not observed by Van Oosten) is that containment may only be partial (as in prototypical sitting in chairs) or be less transparent. Consider the following corpus examples:

- (9) a. Wanneer men de luiken [. . .] openzet, zit men werkelijk met zijn neus in de jungle.
'When one opens the shutters [. . .] one really sits with one's nose in the jungle.'
- b. Er zit een barst in de spiegel.
'There sits a crack in the mirror.'
- c. Men kan het linnen plafond ontrollen dat ter hoogte van de voorruit zit weggeborgen.
'One can roll out the linen ceiling that sits hidden away above the windshield.'

- d. Onder de huid van de wagen zit de allerhoogste kwaliteit van mechaniek.
'Under the skin of the car sits the highest quality of mechanics'
- e. Er zit wel 70 keer zoveel staal in dit schip.
'There sits 70 times as much steel in this ship'

The high productivity of CONTAINMENT-*zitten* continues to enhance the lack of commitment to a specific position of the referent. However, there continue to be subtle references to position. Van Oosten (1984:47) mentions the following variation:

- (10) Zitten/Liggen er zakdoeken in de koffer?
'Sit/lie there handkerchiefs in the suitcase?'

Liggen is a logical choice, given that handkerchiefs are non-rigid and thus profiled as extending along the horizontal plane (cf. Section 4). About the use of *zitten*, Van Oosten (1984:147) says that one uses it "either when the handkerchiefs are not neatly folded up and so they are not appreciably longer than high, or when they are not in a horizontal position". This needs some nuancing, as both verbs *can* be used in the contexts of the handkerchiefs neatly folded and in horizontal position. This same reality, however, can be conceptualized in alternate ways (admittedly, with some influence from the ontological specifics). The coding with *zitten* furnishes a conceptualization which simply *ignores* the referent's position and shifts the profile to containment.

Of course, the context will often influence the coding. The relative size of figure and ground, for example, is important. The larger the containing ground, the more likely that the figure's position will be profiled and not containment. (In passing, Van Oosten makes a similar comment on marbles in a basket, but attributes the variation once more to rigidity associated with *zitten*, which, however, does not apply.) While there is some freedom of choice, speakers usually have good reasons to shift the profile to containment. For instance, in the case of (10), *zitten* is a more logical choice than *liggen* when the speaker wonders whether the handkerchiefs have been packed or not, or when the suitcase is closed (the handkerchiefs being visually 'hidden'), or when the suitcase itself is not in a horizontal position. Another typical context that favours *zitten*, closely related to the relative size of figure and ground, is when the figure is really being crammed or stuffed into the container, or perceived as such. In these contexts *zitten* typically occurs with *vol* 'full' or similar expressions. Some more examples will be discussed below.

Van Oosten (1984:157) suggests in a footnote that *zitten* in this context of (10) conveys "a sense of impermanence" the referent being not in its usual place. Similarly, Van den Toorn (1972:463) resorts to the idea of "movability" (*verplaatsbaarheid*) to explain the difference between *de bedden staan in de kamer*

(‘the beds stand in the room’) and *de bedden zitten in de verhuishwagen* (‘the beds sit in the moving van’). However, even when *staan* is used, the object can be regarded as movable. The difference, as I see it, is one between posture versus containment; in the latter case, the entity’s position has become irrelevant. A clear example from our corpus illustrating the contrast is the following:

- (11) b. De automaat zit of staat in een uitstalraam, in een blinde muur of op zijn eentje.
‘The vending machine sits or stands in a shop window, in a blind wall or on its own.’

Zitten refers to the vending machine as being (partially) contained in and attached to the wall, whereas *staan* codes it as a free standing object. Contrary to Van Oosten’s view, the sense of impermanence is clearly higher for *staan* than for *zitten*, something to which we return shortly.

Among others, Lakoff and Johnson (1980) have shown the pervasive nature of metaphors based on the notion of a container: many abstract entities (situations, events, etc.) are commonly conceptualized as containers. Logically, then, whenever the CONTAINER metaphor applies, *zitten* becomes a plausible coding option. Here are some clear examples from our corpus (the labels indicate which entity is perceived as a container):

- (12) a. BODY (as container for character traits)
In elk kind zit een leraar. / Gokken zit de Britten in het bloed.
‘In every child sits a teacher.’ / ‘Gambling sits the Brits in the blood.’
- b. GROUP
de groep waar ik nu in zit.
‘the group that I now sit in.’
- c. PACKAGE OFFER
Varen met de Majesty zit in het pakket van Belgische reisbureaus.
‘A boat trip with the Majesty sits in the package of Belgian tour operators.’
- d. GAME/RACE
Er zit meer spanning in de wedstrijden.
‘There sits more suspense in the games.’
- e. PROBLEMS
Financieel zitten die gemeenten niet in de problemen.
‘Financially these communities do not sit in problems.’
- f. TEXT
Ook het aspect wraak zit in de rijk gelaagde tekst van Shakespeare.
‘Also the notion revenge sits in Shakespeare’s multi-layered text.’

h. LIFE

Maar hun leven zit vol leugens en opschepperij.
 'But their lives sit full of lies and bluff.'

These are but a handful of examples, the list is virtually endless. One sub-schema that can be mentioned is that of time periods conceptualized as containers. A sentence like

- (13) Het publiciteitsblok dat tussen trailer en hoofdfilm zit wordt almaar langer.
 'The advertisement block that sits between the trailer and the main film becomes longer and longer.'

nicely aligns physical space (strips of celluloid) and time (the time to play these strips of celluloid). Similarly, in response to the question *waar zitten we in de film?* (lit. 'where sit we in the film?') one can refer to the story (e.g., in the middle of the scene where they kiss) or to time (e.g., fourteen minutes from the end).

Also in the case of metaphorical extensions subtle coding variations may occur, which understandably are much harder to explain. Consider the idea of being part of a group, conceivable as being contained by the group. As illustrated above, one can use *zitten*. But when focussing on the result of you being thrown out, you say *ik lig eruit* (lit. 'I lie out-of-it')¹³; this is also applicable to games *hij ligt uit de wedstrijd* (lit. 'he lies out of the game'). However, when you are not involved at all, you say *ik sta er buiten* (lit. 'I stand outside-of-it'). Compare also, the Dutch translation of English *outsider* as *buitenstaander* (lit. 'outside-stander'). While highly conventional, there is a logic to these differences. When you are not involved (i.e. 'stand outside'), you still have a choice and can always step in (notice the metaphor). This is, of course, related to prototypical *staan* being the starting position for walking, whence metaphorical extensions to all kinds of activities.¹⁴ Once inside, containment (*zitten*) is profiled at the expense of posture. When you involuntarily fall out (notice once again the metaphor), the image is that of lying, the posture from which it is most difficult to become active and/or involved again. If your moving out is deliberate, one typically says *eruit stappen* 'step out-of-it', the logical counterpart of 'stepping in'. This shows that the use of posture verbs is not an isolated phenomenon, but an exponent of some more general typology (cf. Section 6).

A special case of CONTAINMENT-*zitten* occurs in the context of clothes fitting well:

- (14) a. Het belangrijkste aan schoenen is dat je er goed in zit.
 'The most important thing about shoes is that you sit well in them.'
 (= that they fit well)
 b. De collectie heeft iets sportiefs en zit comfortabel.
 'The collection has something sporty to it and sits comfortably.'
 (= is comfortable)

Van Oosten (1984:154) analyzes cases like these as “patient-subject sentences” often also called middle constructions. However, the subjects in these examples are not promoted patients but locations that in the non-middle equivalent are expressed prepositionally. This type of construction, not so common in English, is more accurately called “adjunct middle” (see Peeters 1999). In other words, *deze stoel zit prettig* (‘this chair sits comfortably’) is the middle alternation of *het is prettig voor mij om op deze stoel te zitten* (‘It is comfortable for me to sit on this chair’). While the latter is a marked construction, it shows that the adjunct middles in (14) are a constructional variant of CONTAINMENT-*zitten*: they express that the person (or part of him/her) is ‘well-contained’ by the clothes, i.e. ‘sits’ in them comfortably, as is the case for comfortable chairs. As Van Oosten (1984) observes, in similar contexts *staan* can be used:

- (15) a. Deze nieuwe jas staat je goed.
 ‘This new coat stands you well.’ (=suits you)
 b. Het polohemd staat schitterend bij de zomerblazers.
 ‘The poloshirt stands magnificently with the summerblazers.’
 (=match well)

but the meaning of these sentences is quite different, as they present an evaluation of one’s appearance (‘it suits you’), which may but need not be related to the clothes’ fit. Van Oosten’s explanation that the use of *staan* goes back to how one models clothes, i.e. standing up, is essentially correct. Vertical elevation aids perception, and certainly here, since the clothes will fall in their best form.¹⁵

Let us return to locational expressions with *zitten*. If there is close containment, there is typically also contact (but not necessarily so, as in some of the examples above). Going back to the prototype, if one sits in a chair with considerable degree of contact and containment, one’s freedom of movement will be quite constrained because of that position. This has laid the basis for other quite productive extensions of *zitten*, as illustrated by some examples from our corpus:

- (16) a. Miljoenen mensen zitten opeen gepakt in de steden.
 ‘Millions of people sit packed together in the cities.’
 b. Daarvoor zitten mensen in de gevangenis [. . .] er zitten mensen vast.
 ‘For that people sit in prison [. . .] there sit people locked up.’
 c. [. . .] het volledige uniform, van de muts tot de kousen en alles wat ertussen zit.
 ‘the entire uniform, from the bonnet to the socks and everything which sits in between.’
 d. Deze schroef zit muurvast.
 ‘This screw sits wall-solid.’ (=as tight as can be)

- e. Dit meubel zit vast met lijm.
'This piece of furniture sits fastened with glue.' (= is glued together)
- f. Dit is een draagbare tafelklok, want er zit een handvat op.
'This is a portable tableclock, because there sits a handle on.'

In all of these uses, the focus is on contact: the figure is stuck within, between, or onto the ground. Similar to the CONTAINMENT usage, the idea of posture is quite demoted in the CONTACT reading of *zitten*. The first two examples activate both the concept of being contained and that of being in a fixed position. The two often co-occur and the use of *zitten* to denote containment very often incorporates the idea of being stuck or hidden. The example about the uniform situates the figure between two other entities, where containment is less transparent (located within the confines of the area between the reference points). The other examples do not really activate the idea of containment anymore and strongly profile the firm contact, the figure being fixed to the ground with whatever means: glue, chains, nails, screws, or just by itself.

In short, whenever an entity is attached to another entity, *zitten* becomes a most plausible coding candidate. Some other examples also mentioned by Van den Toorn (1972) are *de poten zitten aan de tafel* ('the legs sit to the table', i.e. are attached to) or *de armen zitten aan de romp en de oren aan het hoofd* ('the arms sit to the trunk and the ears to the head'). The focus on CONTACT also underlies the following uses:

- (17) a. De kat zit weer aan de kaas.
'The cat sits at the cheese again.' (= is eating of it)
- b. Wie heeft er aan de taart gezeten?
'Who has sat at the pie?' (= who has eaten of it?)
- c. De engerd zat altijd aan de vrouwen.
'The creep always sat at the women.' (= touching them harassingly)

In these examples, the contact has a strong negative connotation, as being of the improper type, often also leaving a mark. This negative connotation is common with the metaphorical extensions which, as with the CONTAINMENT reading of *zitten*, are very productive. Here is a typical example:

- (18) a. Aan alle eenvoudige oplossingen [. . .] zitten grote nadelen vast.
'To all simple solutions [. . .] sit enormous disadvantages attached.'

This is a metaphorical attachment, to conceptualize that one thing entails another, usually an unwanted side-effect (disadvantages in the example). As said, being closely contained in, or firmly attached to, something prevents free movement. Hence the common use of *zitten* where abstract motion (change, progress, etc.) is stopped:

- (19) a. Het overleg zit muurvast.
 ‘The consultation sits firm as a wall.’ (= is completely stuck)
 b. De koers zit zo vast als beton.
 ‘The exchange rate sits fixed as concrete.’ (= is completely stuck)
 c. Andere bedrijven zitten vast aan de eigen producten.
 ‘Other companies sit attached to their own products.’ (= cannot change freely)

Notice the presence of *vast* ‘firmly attached’ in all of these examples (as well as in some of the ones above); in the last example, it is the particle of the phrasal verb *vastzitten* (*aan*), lit. ‘sit firmly attached to’. The opposite of *vast* is *los* ‘loose’, which when combined with *zitten* of course negates the idea of firm attachment, e.g., *het touw zit los* (‘the rope sits loose’).¹⁶

In some uses, the notions of CONTAINMENT and CONTACT are not retained, and *zitten* merely refers to absence of movement or activity, as in the following example:

- (20) Sindsdien heeft de concurrentie niet stilgezeten.
 ‘Since then, the competitors have not sat still.’ (= have been very active)

Actually, these are constructions with the phrasal verb *stilzitten* ‘sit still’ which in literal use refers to “being in a sitting position without moving”. Not being able to sit still is often regarded as a negative quality, irritating the beholder. When used metaphorically, *stilzitten* refers to absence of activity, essentially similar to what Newman (this volume) has called “non-activity sit”. Strikingly, in contrast to literal use, the negation of metaphorical *stilzitten*, which expresses the idea of having been (pro-)active (typically in different fields) is mostly evaluated positively.

While CONTACT usually implies halting of (abstract) motion, CONTAINMENT need not, as illustrated by the following examples:

- (21) a. Er zit altijd beweging in de collecties.
 ‘There always sits movement in the collections.’ (= they are changed, updated)
 b. Er zit actie in de film.
 ‘There sits action in the movie.’

Here, the idea is not that of being stuck, but that the movement is contained within the ground (notice the use of *in*) or that the entity’s movement is due to some inherent quality.

The notion of firm contact has laid the basis for yet another extension, where *zitten* has come to refer to possession. As was also the case for the examples in (17), there is a strong negative connotation, as illustrated in the following examples:

- (22) a. Men zit met een teveel aan kantoren.
 'They sit with a surplus of offices.'
- b. Een aantal mensen zit nog met een oudere moraal.
 'A number of people sit with old-fashioned morals.'
- c. Je zit met het probleem van de beperkte zendtijd.
 'You sit with the problem of limited broadcast time.'
- d. Daar zit ik wel mee.
 'I sit with that.' (=I have a problem with that)
- e. Ik zit zonder geld.
 'I sit without any money.' (=I do not have any)

All these cases refer to situations where one either possesses a non-enviable entity (use of preposition *met* 'with') or does not possess an enviable one (preposition *zonder* 'without'). In all cases the figure is a person stuck because of the possession. This lines up with Lakoff and Johnson's (1980) analysis of POSSESSION AS LOCATION, and more particularly, location within the person's reach (metaphorical accompany meaning of *with*). Notice also the difference between *met een probleem zitten* ('sit with a problem') and *in de problemen zitten* ('sit in the problems'). The latter activates CONTAINMENT and the plural form is warranted to support it: the problems are manifold and perceived as surrounding or enclosing the figure (cf. also *ik zit in moeilijkheden* lit. 'I sit in difficulties', i.e. I have problems). It can be added here that the normal Dutch word for "possess" is *bezitten*, with the transitivizing prefix *be-*; there is, however, no inherent negative connotation here.¹⁷

The above discussion has substantiated how most uses of *zitten* have completely lost their commitment to the referent's posture. Given the considerable variety already present in the literal domain, these extensions appear well-motivated. Of these, the ones expressing CONTAINMENT and CONTACT/BEING STUCK are the most productive, together accounting for more than half of all attestations. This also explains the overall high frequency of the verb compared to *liggen*. (The high frequency of *staan* is due to it being the canonical position for humans). *Liggen* and *staan* are clearly different in their more salient commitment to posture. However, Dutch also has extended these verbs to cases where this posture may no longer be self-explanatory. The next section will map out the major patterns, focussing primarily on locational expressions.

4. Basic posture: the case of *liggen* and *staan*

To understand the general motivation underlying the use of posture verbs in locational expressions involving inanimate objects, one has to see how Dutch has

generalized the human posture prototype to some image-schematic abstraction which can be applied to virtually any object. Recall that the prototypes of *staan* and *liggen* represent maximally distinct clusters of attributes as summarized in the following table.

<i>Staan</i>	<i>Liggen</i>
(i) canonical position	non-canonical position
(ii) higher than wide	longer than high
(iii) physical effort involved to maintain posture	no physical effort to maintain posture
(iv) starting position for walking	normal position for inactivity and rest
(v) associated with power and control	associated with rest, weakness, and death

Traditional accounts have mostly focussed exclusively on property (ii) — the dimensions of horizontality and verticality — to explain the numerous extensions of *liggen* and *staan*. This works in many cases, e.g., a book on its smallest side will be coded in terms of standing as it is more vertical than horizontal, whereas when it is on one of its covers (or on both, if opened) *liggen* will be used, the horizontal extension being larger than vertical one. These dimensions can also be related to property (iii): if an entity lacks the quality to support a vertically elevated position, such as is the case with non-rigid objects, (e.g., blankets, paper, etc.), liquids and substances, gravitational forces will automatically pull them towards a horizontal extension.

- (23) Er ligt {een krant/water/sneeuw/zand} op de weg.
 ‘There lies {a newspaper/water/snow/sand} on the road.’

Other objects for which the horizontal extension is quite salient, e.g., lines, roads, paths, or layers, are logically coded with *liggen*. Observe that this also applies to objects that have a geographical extension, such as regions or cities.

- (24) a. De hoofdstad Hanoi ligt aan de Rode Rivier.
 ‘The capital Hanoi lies on the Red River.’
 b. Belize is kleiner dan België en ligt tussen Mexico, Guatemala, en Honduras.
 ‘Belize is smaller than Belgium and lies between Mexico, Guatemala, and Honduras.’

More complex cases are, for example, concepts like HEAP or MOUNTAIN (real ones or hyperbolic ones e.g., *een berg was*, ‘a mountain (=huge pile) of laundry’). They have the required vertical elevation and rigidity to support themselves, yet are coded with *liggen*. (Notice, however, the metaphor *de voet van een berg* ‘the

foot of a mountain' which relates to the image of standing). Presumably, their horizontal extension is responsible for the use of *liggen*. Even when a heap consist of parts that themselves can be coded with *staan* (e.g., a heap of cans) *staan* is not sanctioned for the whole, as the concept HEAP implies disorder of the elements within it. Another illustration is *een hoop hooi* 'heap of hay' which is coded with *liggen*, whereas *hooimijt* 'haystack' is coded with *staan*. In the latter case, the stack is the entity that ensures the rigidity and verticality. Notice that they tend to be built around a pole. The word *stapel* 'stack', in contrast, is more "transparent" and allows the position of the stacked objects to trigger the choice of posture verb, as shown by the following contrast:

- (25) a. Een stapel papieren lag op het bureau.
 'A stack of papers lay on the desk.'
 b. Er stond een stapel blikjes midden in de winkel.
 'There stood a stack of cans in the middle of the shop.'

These cases show that the choice of the verb does not simply reduce to the ontological vertical or horizontal dimensions, as further illustrated by the following examples:

- (26) {De borden / de telefoontoestellen / haar schoenen} stonden op de tafel.
 '{The plates / the phones / her shoes} stood on the table.'

In his analysis of Dutch posture verbs, Van den Toorn (1972) points out that in addition to verticality and horizontality, there are some complicating factors (one of which is rigidity, which has already been mentioned). In connection to examples similar to those in (26), where *staan* is used for hard objects *not* on their smallest side (and thus more wide than high), Van den Toorn observes that these objects can only be functional in one particular position: "Of these objects it can at least always be said that they have a top, sometimes also a bottom" (Van den Toorn 1972: 459, my translation). Clearly, the notion of "inherent orientation" is relevant, yet instead of focussing on the top part, as Van den Toorn does, it seems that the bottom is more crucially involved and a more logical extension from the prototype ("be on one's feet").¹⁸

To put it another way, if objects have a side that typically functions as their base (or that is conceived as such), then *staan* is the unmarked coding for conveying the idea that the object is resting on this base. Van den Hoek (1971) has introduced an interesting term to denote the base, *sta-vlak*, literally 'stand-side' as opposed to *zitvlak* (literally 'sit-side'), a common Dutch word for buttocks. In more technical terms, one could say that there is a mental operation, a conceptual scanning along the vertical axis, from the base upward, which activates the idea of verticality.¹⁹ Only if interpreted in this way, can the notions of verticality versus horizontality be applied.

A similar claim is defended in Serra Borneto's analysis of German posture verbs. Fully in line with our analysis, he observes that "the schema of "base" has something to do with profiling some vertical aspects in the scene" (1996: 463). As he correctly points out, the concepts *BASE* and *VERTICALITY* are strongly related (he considers *BASE* as a subpart of *VERTICALITY*), since the base is the reference point in our perception of verticality, it being the obligatory point where the gravitational axis is interrupted. Notice a clear point of difference between Dutch and English. Newman (this volume) mentions that English sanctions *stand* in cases where "the objects have parts to them which can be construed as 'legs' ", but that it seems stilted or even pretentious to say *A Chinese statue stands on the piano*. Dutch goes much further in its coverage, as the object need not have leg-like parts at all and it has, moreover, promoted the use of *staan* to the general rule if the canonical position of resting on a base applies. And it applies to a virtually open-ended set: plates, dishes, containers, ashtrays, printers, staplers, cars, trains, pies, etc.

In short, the ontological dimensions of horizontality and verticality are made inferior to the notion of resting on a base ('stand-side') which triggers a vertical scanning and thus *staan*. This clearly goes back to an image schematic perception of prototypical standing — also for humans the canonical position — where one rests on one's feet (one's 'stand-side'). That there is a scanning operation from this base upward may be further corroborated by cases where the base clearly is the origin of a scanning, but where the ontological direction is not a vertical one. Trees and shrubs do have roots (their base) and typically extend ('grow') upward from there. Hairs also have an origin from which they grow and so have branches, even though the ontological direction can be lateral, as in

- (27) a. Er staat veel haar op zijn kin.
 'There stood a lot of hair on his chin.'
- b. De takken staan haaks op de stam.
 'The branches stand at right angle on the trunk.'

Admittedly, growing hairs and branches may typically have vertical orientation, and these examples could be regarded as conventionalized extensions from the source domain of verticality, as also witnessed by the preposition *on*. The conceptualization of hair as 'standing' on the head is thus well-motivated, but nevertheless, it feels awkward to code long hair with *staan* because of the salient downward orientation and absence of a right angle. If the context renders the latter salient *staan* is again acceptable, e.g., *haar lange haar stond naar alle kanten* 'her long hair stood in all directions'.²⁰ The expression *haaks staan op* has conventionalized to code any two lines at right angle, regardless of their orientation. In any case, there remains a bi-dimensional scanning operation starting at the intersection. A similar story can be told for *loodrecht staan op* (lit. 'stand perpendicular on'), which may

also retain some of the original verticality, given the element *lood* ‘plumb, plummet’, activating more the idea of the gravitational axis.

If there is no base that imposes a vertical scanning, the ontological dimensions remain as the only distinctive attribute. For example, although a book has an inherent orientation (front-back and top-bottom), it is not conceived of as having a base, so the dimensions of its actual position determine the use of *liggen* vs. *staan*. Similarly, if the referent has a base, but is not resting on it, the actual dimensions come into play. Consider the following cases:

- (28) a. De borden liggen op de grond.
‘The plates lie on the floor.’
- b. De borden staan/zitten in de afwasmachine.
‘The plates stand/sit in the dish washer.’
- c. De borden staan/*zitten in het afdruprek.
‘The plates stand/*sit in the plate rack.’

The use of *liggen* in the first sentence triggers the inference that not all the plates are in their functional position; rather the implication is that they are in disarray or even broken (cf. also Serra Borneto 1996:463). In the latter case, *liggen* is in fact the only possibility.²¹ Logically, then, *liggen* is the verb that occurs in certain fixed expressions as well (which may apply to any fragile object), e.g., *in scherven/duigen liggen*, literally ‘lie in shards/staves’, i.e. be shattered. Informal tests with informants have shown that if one turns a plate upside down, the typical coding is with *liggen*. However, if the vertical extension is quite pronounced (as, for example, with bottles), flipping the object upside down does not hinder a coding with *staan*, although one mostly adds a modifier, e.g., *ondersteboven* ‘upside down’ or *op hun kop* ‘on their head’.²² The choice between *staan* and *zitten* in (28b) pertains to whether one focuses on the containment in the dish washer (*zitten*) or on the vertical position in which they are put in the rack (the base is cancelled out). *Zitten* is quite implausible for the last sentence, as the idea of containment is rather far-fetched here. (With the proper contextual support this could of course become more acceptable.)

The image of a base may overrule the rigidity claim, as in the case of soft bags ‘standing’ on their base. Possibly, some rigidity is nevertheless present here, as is also the case with, for example, filled bags: they have acquired enough rigidity to sanction *staan*. Conversely, mats clearly have a proper orientation, yet the side resting on the floor is not interpreted as a base, and so cannot felicitously be coded with *staan*, plausibly because their horizontal coverage is their primary function (cf. Fagan 1991 for a similar observation).

A special set of entities to be mentioned here are ball-shaped objects, or objects perceived as having such a shape or one that is sufficiently symmetrical, such as beans, lumps, crumbs, heads of lettuce, points (on a line), cubes, or even

junk. Not only do they lack a base but also by definition, they lack a dimensional difference, all dimensions being equal (Serra Borneto has called this “lack of dimensional saliency”). The perception is one of one-dimensionality and thus *liggen* is the logical choice, since verticality implies bi-directionality, its axis being defined in relation to a ground level (Serra Borneto 1996:482).²³ An interesting parallel between ball-shaped objects and the prototype (human being in lying position) is that the corresponding verb of movement typically is in both cases *rollen* ‘roll’. In line with what has been said, there are cases where *staan* could still be used. One is when the object has a base, e.g., *Waar staat de wereldbol?* ‘Where stands the globe?’ (the object representing the earth). Another is when the object is of considerable size (especially vis-à-vis its ground or the perceiver), in which case the perception of verticality comes in, e.g., *er stonden reusachtige bollen op het plein* ‘there stood gigantic balls on the square’.

Summing up then, it can be argued that the dimensions of verticality and horizontality do motivate the different uses, provided one considers the *perception* of these dimensions (mental scanning) rather than their actual realization in the world. In particular, the notion of a base is crucial to understanding how Dutch has conventionalized the image of verticality in the case of dimensional ‘mismatches’ between real-world object and verb. Parallel to Serra Borneto’s analysis for German, one can see that one-dimensionality unfolds along the horizontal axis, triggering a coding with *liggen*, and two-dimensionality implies a perception of verticality, leading to *staan* as the proper coding. Unlike German, where presumably *liegen* ‘lie’ has absorbed all cases of non-verticality, Dutch has enriched the semantics of *zitten* to express some cases of absence of either of the two dimensions, shifting the profile to containment and/or immobility.

As has been illustrated by some of the examples, the dimensions here are to be understood not as lines but as planes, incorporating a third dimension, depth (or width). This dimension does not play a crucial role for Dutch: a pole and a wall, despite having a considerable difference in width, are still perceived as primarily extending along the vertical axis; conversely, a fine thread and a spread out blanket, similarly different in width, are both primarily perceived as extending horizontally. Especially for the latter, width strengthens the notion of horizontality.

5. Coding variations

One of the pivotal claims of Cognitive Grammar is that meaning relies on our ability to conceptualize the same object or situation in different ways. As Casad (1996:23) summarizes it: “the speaker’s ability to conceptualize situations in a variety of ways is, in fact, the foundations of cognitive semantics”. We have

already mentioned some of these in the preceding section; the present section will briefly discuss some other common alternations.

5.1. Posture versus (implicit) containment

A common metonymical variation that can occur with basically any object is illustrated by the following examples:

- (29) a. Het zout {ligt/staat} op tafel.
 'The salt {lies/stands} on the table.'
 b. De boter {ligt/staat/zit} in de koelkast.
 'The butter {lies/stands/sits} in the fridge.'
 c. Er {ligt wijn / staat frisdrank} in de kelder.
 'There {lies wine / stand soft drinks} in the cellar.'

Salt is a substance and as such it can 'lie' on the table but when referring to the salt contained by ('sitting in') the salt shaker one uses *staan*, as one profiles a container on its base (cf. also Serra Borneto 1996:463). A package of butter can 'lie', but when this same package is ('sits') in a container, *staan* is used. The use of *zitten* overrules this distinction and only codes the containment. In the last example, *liggen* most likely does not refer to the wine as a free substance (it could, however, in the proper context) but to it being contained in bottles in a horizontal position, this being the proper position for wine storage. For soft drinks, on the other hand, *staan* is used as here the bottles are typically in an upright position on their base.

In line with other variations discussed earlier, these common metonymical shifts are largely determined by the interaction of basically two factors: (1) the perceived closeness of contact, related to the relative size of figure and ground, and (2) the salience of the referent's conventional posture within the container (cf. bottles of wine vs. soft drinks). Notice that this also extends to humans being in a typical position when 'contained' in some location or (professional) activity. For example, one says *ik zit nog op school* 'I still sit in school', but for teachers and actors one can use *staan*, because they typically stand in the classroom or on stage respectively. Finally, there is the degree to which the container is filled, which is related to the notion of close contact.

Another factor may be the degree to which the container itself is affected. Consider the following contrast:

- (30) a. De kamer lag vol rommel.
 'The room lay full of junk.'
 b. De kamer zat vol rommel.
 'The room sat full of junk.'

I would rather clean up the room of the first sentence than that in the second, as the strong implication is that the latter contains a maximal amount of junk, to the extent even that it is no longer possible to use the room, open the door, etc. The observant reader will have noticed that the constructional possibilities of Dutch allow yet another way to express degree of affectedness, *viz.* by promoting the ground to subject, a construction for which Van Oosten (1984) presents a good analysis:

- (31) a. De papieren liggen in mijn werkkamer.
 'The papers lie in my study.'
 b. Mijn werkkamer ligt vol papieren.
 'My study lies full of papers.'

In the first sentence, the room merely functions as the setting and is consequently coded prepositionally. In the second case, participant status is conferred onto it, focussing more on the fact that the entire room is affected (hence Langacker's (1991) term "setting construction"). Clearly, it is the junk and not the house which determines the choice of posture verb. Compare with a sentence like *de garage stond vol auto's* ('the garage stood full of cars') where the cars being on their base triggers *staan*. In Dutch, a setting construction is quite common with posture verbs; also in these cases, there is often an adverb that expresses the high degree to which the setting is affected, such as *vol* 'full' or *helemaal* 'completely'.

5.2. Location versus verticality

Another common variation already mentioned by Van den Toorn (1972), Van Oosten (1984), and Serra Borneto (1996) concerns the localization of buildings. Their inherent vertical orientation makes *staan* a most logical choice. Consider some examples from our corpus, where verticality is also emphasized by the larger context:

- (32) a. Veel betonnen bouwwerken staan in een corrosiegevoelige
 omgeving.
 'Many concrete buildings stand in a corrosion-sensitive environ-
 ment.'
 b. Gebouwen stonden in de steigers.
 'Buildings stood in scaffolding.'

Typically also, for buildings one says *te koop staan* 'stand for sale' or *leeg staan* 'stand empty', where the notion of endurance over time is also involved. However, *liggen* can also be used, as nicely illustrated by the following example from the corpus:

- (33) Aan deze kant van de woning ligt de voornaamste kamer. [. . .] Rond het huis ligt een prachtige Moorse rozentuin [. . .] Het huis, even buiten de muren van Marrakech, ligt in een geurige tuin vol rozen, oranjebloesems en kruiden.
 ‘On this side of the house lies the most important room [. . .] Round the house lies a gorgeous Moorsque rose garden [. . .] The house, just outside the walls of Marrakech, lies in a garden full of roses, orange blossoms, and herbs.’

Three objects are said to be in a lying position: a room, the garden and the house. In each case, the profile is on the location of these objects, as perceived in the horizontal plane only, as if on a plan or a map, and hence the use of *liggen*. In fact, as Daniel Véronique (pc) has pointed out, in the constructions *het huis staat* vs. *het huis ligt*, the word *huis* clearly codes different objects: in the former, it is the house as a 3D-object with a clear vertical extension, in the latter, it refers to the surface occupied by the house and there is no more vertical extension. Dutch can refer to this as *de ligging van het huis* (lit. ‘the lying of the house’, i.e. its location). Both Van Oosten (1984) and Serra Borneto (1996) talk about this use of *liggen* as conceptualizing the object as a *point* in the field defined by the coordinates (x,y). This is essentially a variant of our analysis, since points, too, are conceptualized as having minimal horizontal expansion. However, in many contexts in our corpus, the horizontal expansion, i.e. the conceptualization as a plane rather than as a point, is more salient.

Whichever view, it is clear that the focus on “geotopographical location” as Serra Borneto has called it, is quite powerful, as I can felicitously use *liggen* even when standing right in front of a quite saliently vertical building, e.g., *de kerk lag pal voor ons* ‘the church lay right in front of us’. The past participle *gelegen* has quite clearly incorporated geotopographical location as its primary meaning, particularly when combined with locational expressions, e.g., *nabijgelegen* (‘lying near’=close-by), *afgelegen* (‘remote’), *hogergelegen* (‘lying higher’=higher up), *achtergelegen* (‘lying behind’).²⁴ Constructions using *liggen* for buildings are in fact similar to those of cities and land areas, which also select *liggen*, as mentioned earlier. They also frequently occur with *gelegen*.

A special case is a sentence like

- (34) In de zesdaagse oorlog in 1967 lag het American Colony Hotel weer in de vuurlijn.
 ‘In the six-day war in 1967, the American Colony Hotel lay again in the line of fire.’

in which not only the building’s location is in focus but it is also explicitly profiled as a point (conceptualized as a round-like object) on a line which makes *liggen* the

proper coding candidate. Another possibility offered by Dutch is to see a building as being contained or stuck in a location, triggering *zitten*, as in the following example.

- (35) Dit kleine shoppingcenter [. . .] zit ingesloten tussen twee
supermarkten.
'This little shoppingcenter [. . .] sits locked in between two
supermarkets.'

The strong implication of being fixed in that location is rendered explicit in this example by *ingesloten* ('locked in').

5.3. Rigidity and verticality

While non-rigid objects were shown to trigger a coding with *liggen*, they can of course be in a situation where this property is demoted and vertical elevation becomes possible. A mat that is rolled up, for example, can be coded with *staan* if resting on its smallest side and so can newspapers that are in a vertical position in a rack. Some idiomatic cases also find a natural explanation here. For instance, for clothes *liggen* is used, but when they acquire enough stiffness because of dirt or frost, for example, one can say

- (36) Zijn kleren stonden stijf van het vuil/van de kou.
'His clothes stood stiff of the dirt/of the cold.'

It is unlikely that the notion of verticality is salient in these construals; what seems to trigger the coding with *staan* is the idea that there is an extension *in addition* to the usual one on the horizontal plane. In other words, this usage adds a two-dimensional image.

More difficult is the case of hats, bonnets, crowns, and the like, which Dutch speakers generally perceive as 'standing' when on a person's head, but as 'lying' in other cases (e.g., on the table).²⁵ What probably motivates the use of *liggen* in the latter case is that they are not in the position for which they were made, i.e. with their down-side resting on the person's head. Furthermore, if on the head, they are the end point in a series of 'vertical stacking', for which *staan* is to be used. Dutch sanctions the use of *staan* to express this idea of stacking: a person 'stands' on his/her feet or legs, the trunk 'stands' on the legs, the head 'stands' on the neck, the hair 'stands' on the head (cf. also above) and the hat 'stands' on the head. It is not so common to picture the body this way, but one does find traces of it in idiomatic expressions:

- (37) a. Als je hoofd niet vaststond, . . .
'If your head would not stand firmly attached, . . .' (you'd lose it,
that's how distracted you are)

- b. Met al dat werk weet ik niet meer waar mijn hoofd staat.
 ‘With all this work I no longer know where my head stands.’ (i.e. I don’t know what to do first)

The first example may be coded with *vastzitten* as well, in which case the vertical perception would be demoted in favour of a focus on firm contact.

Another case where vertical scanning comes in is illustrated in the following contrast:

- (38) a. Er ligt (een plas) water op de weg.
 ‘There lies (a puddle of) water on the road.’
 b. Er staat water in de kelder.
 ‘There stands water in the cellar.’
 c. De straten staan onder water.
 ‘The streets stand under water.’

In the last two cases, the focus lies on the vertical extension, the water being up to a level higher than normal. For (38b), *zitten* could be used, but this would strongly imply that the water is in the walls (i.e. contained by them) and not in the room itself. The last example is again a “setting-construction”, this time with a more implicit comment on the degree of affectedness (“under water”).

5.4. Non-activity alternations

As will be recalled, Dutch *stilzitten* refers to the idea of sitting still. Alongside that, one also has *stilstaan* ‘stand still’ and *stilliggen* ‘lie still’. Used literally, these verbs are relatively straightforward, meaning that one does not move while in the particular posture expressed by the verb. However, when used metaphorically to denote absence of movement or activity, the differences may no longer be so transparent:

- (39) a. {De trein/de tijd/mijn horloge} staat stil (*ligt / *zit).
 ‘{The train/time/my watch} stands still.’
 b. De machine {staat/ligt} twee weken stil. (*zit)
 ‘The machine {stands/lies} still for two weeks.’
 c. De reactor ligt stil voor onderhoud. (??staat / *zit)
 ‘The reactor lies still for maintenance.’
 d. Het vredesproces ligt nu stil. (*staat / *zit)
 ‘The peace process lies still now.’

Any object conceptualized as a mover, literally or metaphorically, can in principle be coded with *stilstaan*. Given the semantics of *staan* as outlined above, this is quite acceptable for a train, for example, which when not moving is coded with *staan* since it is resting on its base (the wheels). But consider objects, like a watch,

that in normal contexts are not located with *staan* (e.g., *mijn horloge ligt op de tafel* ‘my watch lies on the table’). There is metonymy at work here: it is not really the watch but the hands that are moving or standing still. However, this does not make a difference, since one can equally say *De wijzer staat op vier uur* ‘the hand stands on 4 o’clock’. Most likely, the use of *staan* is sanctioned here by the association that standing it is the starting position for prototypical movement, viz. walking. Notice that if your watch is fast, you say in Dutch *mijn horloge loopt voor* ‘my watch runs ahead’.

As to the distribution of *staan* versus *liggen* the following observations can be made. If the abstract movement is perceived as involving a simple mover (moving over different points on the track), *stilstaan* is to be used. Two highly conventional uses are *de tijd is blijven stilstaan* ‘the time has stood still’, i.e. nothing has changed, and *ergens bij stilstaan* ‘to stand still close to something’, meaning that one takes the time to consider, one stops to think. If the movement is not punctual, but involves a more complex activity, as in (39c), or pertains to an entity evolving over time (spanning a time period rather than punctual movement), as in (39d), *stilliggen* is used. This lines up with the prototype of *liggen* where total rest or inactivity is profiled: the halting is more drastic or all-embracing and it will be more difficult to start up the activity again. A related usage is {*de server/het systeem*} *ligt plat* ‘{the server/the system} lies down’ (=is down). This use of *liggen* can also be related to the expression of objects ‘lying in pieces’, mentioned earlier. Similarly, work that remains undone is coded with *liggen*: *het werk bleef liggen* ‘the work remained lying’. In some cases, as in (39b), both *liggen* and *staan* are possible, shifting the profile along the lines outlined here, but this is not so common. *Stilzitten* is unacceptable in all of these cases as it refers, as will be recalled, to people or institutions not displaying any activity in different fields (being stuck).

5.5. Containment and cause

When containment is involved, the typical verb is *zitten*, also in metaphorical containment. Recall that in locational expressions the profile may sometimes alternate between container and position. In some metaphorical extensions, alternations between *zitten* and *liggen* can occur, cases for which it becomes very difficult to determine what motivates them. Consider two examples from our corpus.

- (40) a. Het unieke ligt in de volledigheid van het systeem.
 ‘The uniqueness lies in the completeness of the system.’
 b. Zou het kunnen dat haar kracht, net als bij Samson, in haar haar
 lag?
 ‘Could it be that her power, just as with Samson, lay in her hair?’

In these example, *zitten* is equally felicitous. Any difference in meaning is of course to be attributed to the semantics of *liggen* versus that of *zitten*, but it is not obvious whether there is any motivation at all apart from mere convention. In any case, this use of *liggen* is less frequent compared to *zitten* expressing containment (almost 50% of the total).

A possible explanation might be that *zitten* continues to activate the idea of being anchored to a more specific point (often 'deep down', 'well-hidden', 'in the middle', etc.) as in many of the examples discussed earlier, whereas *liggen* sees the referent as more generally extending within, or rather, at the basis of the abstract entity. The latter would align the use of *liggen* with cases that code the cause or origin as a horizontal basis, on which the rest is built (as with heaps, mountains, and the like). Consider some typical examples from the corpus:

- (41) a. Aan de basis van Wilsons project ligt een ijzersterke en inventieve dramaturgie.
'At the basis of Wilsons project lies a strong and inventive drama-turgy.'
- b. De onzekerheid ligt aan de basis van de relatief lage waardering.
'The uncertainty lies at the basis of the relatively low valorization.'

Similarly, one has *onderliggend* 'underlying', also common in English, to denote the explanation that 'lies' at the basis. Yet these uses may have another explanation, as the origin is often conceptualized as a point from which the event unfolds along the time line. Points on a horizontal (time) line can only be coded with *liggen*. The following example is consistent with such an analysis:

- (42) De oorsprong van dat fenomeen ligt in de negentiende eeuw.
'The origin of that phenomenon lies in the nineteenth century.'

Another factor that plays a part is the relative size of figure and ground. For locative expressions it was observed that the weaker the idea of close containment (e.g., because the container is quite large in relation to the figure) the more likely that the figure is coded as assuming its typical or relevant position. This can also apply to the metaphorical extensions, although here the judgement is much less transparent. The conceptualization of causes as points of origin of something much larger may be taken in evidence, but so may cases like the following:

- (43) a. Het gebeuren ligt nog vers in het geheugen.
'The event still lies fresh in (the) memory.' (= is well remembered)
- b. De verklaring ligt in het verleden.
'The explanation lies in the past.'

Memory and past can be said to be vast expansions compared to a single event or a single explanation, which thus relate as points 'lying' on/in the ground. What-

ever the underlying motivation (as a basis or as points), it is clear that Dutch has conventionalized the conceptualization of causes, problems, solutions, explanations, etc. as ‘lying’ entities. Typical are constructions like

- (44) a. De oorzaak van de achteruitgang ligt daar niet.
 ‘the cause of the decline lies not there.’
 b. Als het aan de kinderen ligt, [. . .]
 ‘if it lies with the children, [. . .]’ (=if it is up to the children, . . .)

The last example is more about a decision as the cause of what is to follow. Typically also, Dutch codes a decision as ‘lying’: *de beslissing ligt bij jou* ‘the decision lies with you’.

Related to this is a common construction where *liggen* is combined with an adjective, as in the following examples:

- (45) a. De zaak ligt iets ingewikkelder.
 ‘The case lies a bit more sensitive.’
 b. Maar toen Dirk verliefd werd, lag het niet zo simpel.
 ‘But when Dirk fell in love, this lay not so simple.’

This construction is commonly used to code events or actions described in the preceding discourse and picked up with pronouns (*this, it*, etc.) or general nouns like *zaak* ‘case’, *situatie* ‘situation’. This confirms that Dutch typically codes abstract entities such as causes, emotions, problems, situations, etc. as lying objects.

5.6. Lines and scales

The previous section has already clarified how points, either on a line or on a plane, are conceptualized in terms of *liggen*. Also larger parts of lines are coded in these terms. Given that continuations or extensions of events are also typically conceptualized as following or extending over a line, *liggen* is used in these cases (cf. also the above discussion of *stilliggen* to denote the halting of events). Consider some typical examples:

- (46) a. De resultaten lagen in de lijn van de verwachtingen.
 ‘The results lay in the line of expectations.’ (=were as expected)
 b. Het handelen ligt in het verlengde van het denken.
 ‘Acting lies along the continuation of thinking.’ (=follows from, is a continuation of)
 c. Een aërodynamica die niet altijd helemaal in het verlengde van het lichaam ligt.
 ‘Aerodynamics which do not quite lie in the continuation of the body.’ (=are not an extension from)

One of the common metaphorical uses of the concept *LINE* is to express time (cf. Lakoff and Johnson 1980); a number of variations are possible here. One can conceptualize every moment in time as points on the time line or as areas. In both cases *liggen* is the common coding. In addition to example (43b) we can mention the following examples:

- (47) a. Het ligt achter ons.
 ‘It lies behind us.’ (=it is past)
 b. De toekomst ligt open.
 ‘The future lies open.’

Alternatively, one can conceptualize time as a moving entity, either coming towards us (future being seen as following, past as preceding) or moving forward (future as ahead, past as behind). In these cases, *staan* is a typical coding, as already mentioned earlier, arguably with some degree of personification.

- (48) a. Het is alsof de tijd hier heeft stilgestaan.
 ‘It is as if time has stood still here.’
 b. Het nieuwe jaar staat voor de deur.
 ‘The new year stands in front of the door.’ (=is near, knocking at the door)
 c. Wat staat ons nog te wachten?
 ‘What stands to wait for us?’ (=what is to come?, what can we expect?)

A concept that is also often structured in terms of a line, is that of scales. However, our data show considerable variation as to how entities are located on the scale, and at first sight, it is unclear what determines the choice of posture verb. As part of our corpus draws examples from writing about economics, there are many cases where scales are involved. Here are some examples:

- (49) a. De intrinsieke waarde zit boven de 3000 frank.
 ‘The intrinsic value sits above 3000 frank.’ (=is higher than)
 b. De rubberprijs zit weer aan een top.
 ‘The price of rubber sits again at a top.’ (=is at a peak again)
 c. De reële rente ligt erg laag.
 ‘The real interest lies quite low.’
 d. Dit R&D-budget lag boven de courante winst.
 ‘This R&D-budget lay above the common profit.’
 e. De Dow Jones-index staat veel te laag.
 ‘The Dow Jones index stands far too low.’
 f. De koers voor rubber staat hoger dan voorspeld.
 ‘The exchange rate for rubber stands higher than predicted.’

There are clear differences of frequency: *zitten* is least common, and seems to continue the idea of the value being stuck. *Liggen* is most common, especially in a comparative construction (*ligt hoger/lager dan* 'lies higher/lower than'). The notions HIGH or LOW do not in and by themselves play a determinative role, as both are possible with all three verbs. Serra Borneto (1996:480ff) argues that in these cases the conceptualization of a line often wins out, even if the line is in vertical position (high-low).²⁶ The cases where *staan* is used, in turn, profile the image schema of a vertical scale where MORE IS UP. So, there are competing image schemas, and thus the language establishes one as most applicable. In this case, it is *liggen* as witnessed by its high frequency. In cases like these, it is quite difficult to find factors (besides convention) that determine the use of *liggen* and *staan*. Two additional factors can, however, be mentioned. First, the use of *staan* may be related to the halting of movement as described above, in the sense that the movement over the scale is halted. This lines it up with cases like *de thermometer staat op 10°* 'the thermometer stands on 10°' or *de zon staat aan de hemel* 'the sun stands in the sky', where the halting of (abstract) movement along a vertical axis is coded with *staan*. Another important factor is that when *staan* is used for values, it is very often in the context of values being *noted*, e.g., on the stock market. In that case, a completely different metaphor schema is activated, *viz.* that of printed or written text, which, by convention, is always coded with *staan*. We will not elaborate here on this use of *staan*; it suffices to point out the well-entrenched character of this usage, itself giving rise to extensions to other forms of 'imprintment' (e.g., text on a screen, pictures, etc.).

In short, while some subtle semantic differences can be observed for most cases, some issues remain difficult to explain. For quite a number of these cases, there is considerable degree of conventionality, which has led to a high salience of the individual uses and a reduced salience of the link with the prototype or other uses.

6. Posture and typology

On the basis of all the detailed descriptions of the rich semantic coverage of Dutch posture verbs, it can be said that what motivates their usage are image schematic abstractions based on an anthropocentric prototype. Central to the use of *liggen* and *staan* are the dimensions of horizontality as they are perceived, a perception that may be guided by factors other than the ontological dimensions (e.g., the perception of a base, a 'stand-side'). Central to *zitten* is its posture-independence. The metaphorical uses single out one or more of the prototype's attributes. We have not fully discussed metaphorical extensions, but it can be mentioned that *staan* usually centers around the idea of canonical vertical position (balance,

independence, perceptibility, etc.), *liggen* pertains to abstract entities such as causes, problems, or emotions, except when the idea of containment or contact is at stake, since these are central to *zitten*.

The conventions of Dutch commit the speaker to use posture verbs rather than more general verbs such as *zijn* 'to be' or *zich bevinden* 'be found', which could be labelled LOCATION verbs. As stated in the introduction, francophone speakers have great difficulty here, as French generally prefers LOCATION verbs and is quite restricted in its use of posture verbs. Insights into the rich semantic network of Dutch posture verbs as (partly) described here will help second language learners to understand the contexts in which posture verbs can be used. However, it does not yet provide a clear answer to the question of when posture verbs *should* be used. It is beyond the scope of the present chapter to provide a full answer to this question, and analysis of text corpora is not sufficient here.²⁷ Nevertheless, some general ideas can be mentioned.

What seems pertinent to the distribution is the general focus on location versus existence. Lakoff (1987) has observed that EXISTENCE is basically EXISTENCE IN LOCATION. As a general principle, this is definitely useful, but as far as Dutch is concerned, there is a clear tendency to profile posture rather than mere location/existence. A profile on existence is quite independent of location and/or position. The verb *zijn* will thus typically be used in contexts in which the speaker cannot or does not want to profile the entity's posture. A typical case would be questions probing into the whereabouts of an entity. However, even then speakers will often use posture verbs, assuming that the entity is in its normal position, e.g., *ligt er sneeuw in de Alpen?* 'Lies there snow in the Alps?' or *waar staat je auto?* 'Where stands your car?'. These codings are thus concerned with the 'locational' relationship between "your car" and "where". While a coding with "be" (*waar is je auto?*) still takes the same locational relation as its conceptual base ("Where?"), it is more concerned with the relationship between "car" and "you". This sentence will thus be quite appropriate, for example, in reference to the car having disappeared (e.g., sold or stolen) or when you have not come by car. To take another example, if you are talking about metaphorical borders, you can choose between *liggen* and *zijn* 'be': *waar ligt/is de grens tussen goed en kwaad?* 'Where lies/is the border between good and evil?'. The posture verb commits the speaker to locating the border, the verb *zijn* probes into the very existence of it. These examples show indeed a subtle difference in profile on location versus existence, but one that is difficult to pin down to hard-and-fast rules.

In other cases, other factors may be involved. The contrast between *zijn* and *zitten*, for example, is often that *zitten* conveys more the idea that the figure is an integral part of the ground, or is hidden or stuck. *Waar ben je?* 'Where are you' does inquire about your whereabouts, whereas *Waar zit je?* will typically be used when the speaker has difficulty finding you, or judges it to be remote or well-

hidden (in whichever sense). If you want to say you are a member of a group, you have to use *zitten* (*ik zit in het bestuur*), a coding with *zijn* is unacceptable or very marked at best (**ik ben in het bestuur*). Apparently, the idea of close containment in/by the group is too salient to ignore it. Similarly, *ik ben in New York* 'I am in New York' merely situates you in the city, whereas *ik zit in New York* enforces the idea of you having settled in, being stuck (e.g., at the airport), or something of that nature. I disagree with Van Oosten's analysis of this sentence who says that *zitten* implies "that the location is to last some time but not forever" (1984: 148).

As is obvious, there are subtle differences involved here that warrant more careful analysis. At the same time, the use of posture verbs should not be seen in isolation, but as an exponent of a more general typology, such as that suggested by Talmy (1991), Slobin (1996, 2000) and Berman and Slobin (1994). In their analysis of motion verbs, they observe a typological distinction between VERB-FRAMED languages and SATELLITE-FRAMED languages. The former typically focus on the path, expressed by the verb, the manner being expressed in an optional modifier (e.g., French, *la bouteille entra dans la grotte (en flottant)* 'the bottle entered the cave (floating)'). SATELLITE-FRAMED languages, on the other hand, typically focus on the manner of motion and express the path in a satellite (e.g., Dutch, *de fles dreef de grot in* 'the bottle floated into the cave'). We cannot elaborate on this distinction here; it is sufficient to note that these typological tendencies find an equivalent in the use of posture verbs: French centres on the verb expressing existence or general location, whereas Dutch focusses on the 'manner' of being located (posture). Clearly, the picture is to be nuanced, both for motion verbs and posture verbs. For instance, Talmy and Slobin classify English as a SATELLITE-FRAMED language, yet while in its use of posture verbs English is more 'posture-oriented' than French it is definitely less so than Dutch. The same holds for Swedish (see Lemmens in press). Nevertheless, in general terms, the typological distinction seems to hold (see Lemmens 2001b), and some other features of Dutch can be related back to this typology. Once again, within the scope of the present article, we can merely point out some of the phenomena directly related to our topic.

First, Dutch posture verbs have undergone, to some extent, a process of auxiliation. More specifically, the posture verbs can occur as matrix verbs to an infinitival complement, a construction which has acquired the aspectual values PROGRESSIVE and/or HABITUAL (cf. Heine *et al.* 1993; Kuteva 1999; Stefanowitsch *ms.*). Basically, these constructions mean "doing an activity while in a certain posture", e.g., *ik zit te lezen* 'I sit to read' (=am reading) or *ik sta te wachten* 'I stand to wait' (=am waiting).²⁸ The choice of posture verb follows the same logic as outlined above. *Liggen* and *staan* have a strong association with the entity's posture when the action unfolds, whereas *zitten* need not be associated with any particular position (cf. also Heine *et al.* 1993). So, one can say *ik heb zitten rondlopen* (lit. 'I have sit walk around=I have been walking around'). This usage of

zitten lines up with the CONTAINMENT meaning discussed above: the entity is conceptualized as contained within the activity expressed by the infinitival verb.

A second typological parallel concerns the causative equivalents of Dutch posture verbs. While the diachronic evolution of Dutch has disturbed the original strict alignment (still largely present in Swedish, for instance), the semantic alignment with the network of intransitive uses as outlined in the previous sections still applies in general. Since a letter is coded in Dutch as ‘sitting’ in the envelope, one uses *steken* or *stoppen*, the causative equivalents of *zitten*, to express that one puts it in the envelope. Similarly, since plates are coded as ‘standing’ on the table, *zetten*, the causative equivalent of *staan*, is used to express that you put them on the table. In English, the general verb *put* covers basically all of these cases. Once again, one observes that the typological characterization has to be nuanced.

Other typological exponents can be found, such as for instance the correspondence between posture verbs and motion verbs, already referred to at some places in our description. A further discussion of these would, however, lead us too far afield. Many other issues also deserve further attention, but our description of the semantic network of Dutch posture verbs has hopefully shown that, while one may not arrive at an absolute *a priori* predictability, much of it makes good sense. And if a language makes sense, it will definitely be easier to learn it and to appreciate the subtleties inherent in its coding and coding variations.

Notes

* The research reported on here is part of a larger contrastive study of posture verbs in Dutch, Swedish, and English. Parts of this project have been presented, from different viewpoints, on a number of occasions (see References). I especially would like to thank my colleagues and fellow researchers at the University of Lille for their constructive comments. Also thanks to John Newman for his valuable comments on the first draft of this article. Responsibility of the final product is, of course, mine.

1. The glosses present a literal translation using the English equivalent of the original posture verb. Unless otherwise specified, English will usually use a form of *to be*. Very often, the English version should have a progressive as well, but the glosses preserve the Dutch base form.
2. Cf. Van den Toorn (1972), Van Oosten (1984), Fagan (1991), Gibbs *et al.* (1994), Serra Borneto (1996), Rakhilina (1997), Kuteva (1999), Stefanowitsch (ms), Newman (this volume).
3. Hence, from a Dutch perspective, I disagree with John Newman’s definition (this volume) of kneeling “as a kind of standing on one’s knees”. See Lemmens (forthc., 2001a) for a graphical representation of these variations.

4. With respect to the red herring of polysemy versus vagueness, we largely follow Tuggy's view on the issue: "Many linguists seem to operate on the assumption that once [. . .] a schema is found, the subcases it subsumes may be safely ignored, regardless of their degree of entrenchment or salience. I am suggesting, however, that to the degree that they are salient they must not be ignored." (1993:280).
5. See also Johnson (1987, 1991) or Lakoff (1987).
6. Recently, a listener calling a Flemish radio program (04/09/2001) said *De rijkswacht stond te paard*, lit. 'The state police stood on horse', where the posture of the horse metonymically extends to the whole, and thus the coding ignores the sitting posture of the police officers themselves.
7. Mostly, for humans one uses the expression *op zijn hurken zitten* 'sit on one's haunches', where *hurken* is a relic that only occurs in this expression and as an independent verb meaning "to squat". It is of uncertain etymological origin, but said to be possibly related to Middle Dutch *hukē* 'small child'.
8. Rakhilina (1997) reveals a similar usage for Russian *sidet* 'to sit'.
9. As with 'regular' *zitten*, there is vagueness here as to whether the person is sitting on the side of the bed with the feet on the floor or on the bed itself, e.g., in a yoga-like position.
10. There seems to be some variation in this judgement, however.
11. Clearly, the containment here does not pertain to the whole space as delineated by the room, but is only partial, taking as its scope that part of the room which can be occupied (filled) by people. It is that part, and not the entire room, that is saturated.
12. This is confirmed by experimental research (see Lemmens in press, 2001b).
13. This example is mentioned but not explained by Van Oosten (1984). As in English, Dutch also allows us to profile the 'throwing out': *Ik werd eruit gegooid* 'I was out-of-it thrown'. In line with most other cases, when profiling the result English uses *be* (*I am out*) and not a posture verb.
14. Typical idiomatic extensions are, for example, *Ze staan op het punt te scheiden* ('They stand on the point of getting divorced') or *Ik sta voor een moeilijke keuze* ('I stand in front of a difficult choice'). The latter is clearly related to the prototypical situation where one has to choose which way to go.
15. We can add that the idea of being on display often triggers *staan* or its causative equivalents (*stellen/zetten* 'put'), e.g., *tentoonstellen* 'put on display, exhibit'.
16. As is intuitively obvious, *los* cannot felicitously combine with verbs that have a strong profile on the act of tying up, as e.g., **losbinden* 'tie loose' or **losketenen* 'chain loose'. It works well with more general verbs, e.g., *losmaken* 'make loose' or *losdraaien* 'turn loose, unscrew'.
17. See also Newman's comments (this volume) on "possessive *sit*".
18. Similarly, Fagan focuses on the top part, saying that German does not tolerate *stehen* 'stand' to locate an object "when its top surface is not facing up" (1991: 14), in which case the verb *sein* 'be' must be used.
19. See Langacker (1987: 102–3 and passim) on the notion of scanning.

20. The case of non-perpendicular objects is clearly a context where *liggen* and *staan* compete, the latter probably restricted to cases where one still has an anchor point. Our corpus has not provided enough material for comparison.
21. Similarly, a pie usually “stands” on the table; if *liggen* is used, it refers to one I do not care to eat. Rakhilina (1997) points out that the use of Russian *stojat* ‘stand’ often strongly implies an emphasis on the object’s “functionality”, to a much larger extent than seems to be the case in Dutch, where the notion of a base or inherent orientation is stronger. When bikes are not used in winter and ‘standing’ in the garage, Russian supposedly allows the conceptualization of them as “lying” (i.e. non-functional position), whereas Dutch does not sanction *liggen* in such a case.
22. Fagan (1991) mentions in a footnote that a sentence like *die Vase steht auf dem Kopf* (‘The vase stands upside-down’) “does not describe its actual location but rather its orientation” (Fagan 1991: 145). When it comes to Dutch, I disagree with this claim.
23. In his schema meant to unite some of the properties that govern the choice of verb, Van den Toorn (1972) incorrectly classifies round objects in the group of objects that have more than one possible position.
24. In these uses, the past participle has also lost its reference to past, as obvious from the English translations with a present participle. The definition in Geerts and Heestermans (1992), the standard desk dictionary, is significant: “liggend of een plaats innemend” ‘lying or taking up a space’.
25. As Fagan (1991: 141) points out, hat-like objects are similarly problematic in German, where, however, *sitzen* ‘sit’ is to be used when on a person’s head.
26. This would be the inverse of lines at right angle systematically coded with *staan* even in the case of horizontal orientation.
27. As part of my research project on posture verbs, further experimental research, inspired by Berman and Slobin (1994) and Slobin (1996, 2000), has been set up to allow us to trace the coding differences in a more controlled way. A pilot study for Swedish is reported on in Lemmens (in press); Lemmens (2001b) presents an initial report on Dutch and Learner Dutch (French speakers).
28. In English, one still has the coordination construction *sit/lie/stand and V*, but this has been very much ousted by the progressive *ing*-form.

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CHAPTER 7

The syntax and semantics of posture forms in Trumai*

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1. Introduction

The focus of the current study is the syntax and semantics of the posture forms found in Trumai. The aim is to describe their formal characteristics and to study in detail their semantics, analyzing how one form relates to the others.

Posture verbs in languages of the world have been the object of interest of various researchers (Brown 1994, Haviland 1992, among others). Cross-linguistic studies on “Basic Locative Constructions” (BLC) — the typical form of answer used by speakers of a language in reply to where-questions — reveal that languages vary with regard to the verbal element that occurs in the BLC: (i) some languages have no verb in this construction, e.g. Turkish; (ii) some languages have a single general verb, e.g. Japanese; (iii) other languages have a wide range of verbs occurring in the locative construction, e.g. Tzeltal; (iv) others have a small set of posture verbs that are used in the BLC, e.g. Arrernte (Kita and Dickey 1998:55–61; Van Geenhoven and Warner 1999:61–71). Trumai is a language of the last type: posture verbs occur in answers to where-questions. However, what it is interesting about Trumai is that while some languages have only three or four posture verbs that can occur in the BLC (‘sit’, ‘stand’, ‘lie’, ‘hang’), Trumai has six forms, with rich spatial semantics, as we will see. Another important aspect is that posture verbs in Trumai occur not only in locative constructions, but also in existential ones — a characteristic attested in other human languages. These facts are described in detail in the present study. Before doing this, some background information about the language and its speakers is given below.

Trumai is a genetically isolated language spoken in Brazil, in the Xingu reserve, an area officially recognized and protected by the Brazilian government, where other indigenous groups also live. Although the Trumai population has more than 100 individuals, only 51 people effectively speak the language. The majority of the young members of the community can still understand Trumai,

but use Brazilian Portuguese in their daily communicative interactions. Almost all adults are bilingual in Trumai and Portuguese, with different degrees of fluency in the latter (some adults speak Portuguese daily, alternating between the two languages). In the Trumai community, there are also individuals who speak other languages of the Xingu area; these individuals joined the group via intertribal marriage. In the majority of the Trumai homes there is more than one language being used by the family members.

In terms of morphology, Trumai is almost an isolating language, i.e., words usually consist of a single morpheme. There is little inflectional morphology; therefore, the definition and characterization of word classes crucially relies upon syntactic factors. Trumai has four open word classes: nouns, verbs, adjectives, and adverbs.

In a transitive clause, the basic word order is AOV. The case system and the syntax of the language show an Ergative–Absolutive alignment; however, there is also a Nominative–Accusative alignment in some syntactic patterns. Given that, it is problematic to describe the syntax of Trumai in terms of the traditional grammatical relations of ‘Subject’, ‘Object’, and ‘Indirect Object’. In the current work, I do not use these terms; rather, I employ the labels S, A, O, and DAT when referring to the kinds of verbal arguments.¹

2. The posture forms of Trumai

In Trumai, there is a particular set of forms that expresses information about the body posture of an entity. These posture forms belong to a formal class — which I will call *Spatial Configuration* forms — and whose members are:²

- | | | |
|-----|-----------------|--|
| (1) | <i>la</i> | be standing ³ |
| | <i>aha'tsi</i> | sit/be sitting |
| | <i>chumuchu</i> | lie/be lying |
| | <i>tsula</i> | lie/be lying in a place that is not the floor/ground (earth) |
| | <i>mula</i> | be in a closed place (also: inhabit) |
| | <i>pila</i> | be in a liquid medium |

La, *aha'tsi*, and *chumuchu* are the forms that can be considered posturals, i.e., they specifically refer to body postures. They provide information about the spatial condition of the entity with regard to *orientation* (i.e., vertical elongated, horizontal elongated, or relatively compact position, as described by Newman in the introductory chapter of this book).

Tsula also refers to a lying position, but — as we will see later — this form aligns better with *mula* and *pila*, which do not exactly express body postures. These forms provide information about the spatial condition of the entity with regard to

the *kind of Ground* where the entity is: place that is not the floor/ground (earth), open place, liquid medium (in this chapter, I will use the term *Figure* when referring to the entity whose posture/position is being mentioned, and *Ground* when referring to the location where the Figure is. These terms have been used by various authors, such as Talmy 1985). Despite this difference, we still can say that *pila* and *mula* are in the same conceptual domain as the posturals. The semantics and relationship among the forms presented above are explored in Section 5.

There are syntactic reasons why the forms in (1) should be analyzed as composing a formal class: the Spatial Configuration forms often occur as the verb of a clause (S V), but they can also be found as an auxiliary modifying a main verb (S V_{main} *Spatial Configuration*; A O V_{main} *Spatial Configuration*).⁴ The auxiliary usually refers to the condition of the entity that is the S or A argument of the clause. For instance:

- (2) S V LOC
 Ha chumuchu tehne-n.
 1 lie floor-LOC
 'I lay down/ I am lying on the floor.' [VERB]
- (3) A O V AUX
 Hai-ts kasoro mud husa chumuchu.
 1-ERG dog neck tie lie
 'I am tying the dog's neck, while I am lying.' [AUX]
- (4) S V LOC
 Ha mula pike-n.
 1 be.in.closed.place house-loc
 'I am in the house.' [VERB]
- (5) A O V AUX
 Hai-ts kasoro mud husa mula.
 1-ERG dog neck tie be.in.closed.place
 'I am tying the dog's neck, while I am inside a house/a car.' [AUX]

Only the forms in (1) have this characteristic. Other forms that also refer to conditions or attributes of entities — such as the adjectival roots *uyar* 'leaned', *xerere* 'wet', *enĩ* 'dirty', etc. — do not exhibit similar properties. Adjectival roots can occur as the predicate of a clause (6), but not as an auxiliary modifying a verb (7).

- (6) Amati xerere ka_in.
 Amati wet FOC/TENS
 'Amati is wet.'

- (7) A O V AUX
 *Amati-k chĩ_in tsi-tle midoxos xerere.
 Amati-ERG FOC/TENS 3POSS-mother call wet
 (Amati called his mother, while he was wet.)

There are some few examples in which an adjectival root modifies a main verb, but in this case the root has an adverbial meaning, that is, it refers to the quality of the event (e.g. I saw beautiful=I saw well). If we want to refer to the state/attribute of the S or A argument, a different construction is required, the one with the postposition *tam* 'comitative' (8).

- (8) A O V
 Xerere-a tam chĩ_in Amati-k tsi-tle midoxos.
 wet-3POSS COM FOC/TENS Amati-ERG 3POSS-mother call
 'Amati called his mother, while he was wet.'
 (Lit. Amati called his mother, with his wetness.)

In other words, the forms in (1) occupy a special place in the grammatical system of Trumai. Furthermore, there is a phonological similarity among the forms *la*, *tsula*, *mula*, and *pila* (they all end in the same syllable *la*), which also suggests that they belong to the same formal class; this similarity is explored in Section 5.

In the next section, the syntactic characteristics of the Spatial Configuration forms are presented in more detail. The functional characteristics of these forms are described in Section 4; Section 5 explores their semantic aspects.

3. Syntactic characteristics: the distribution of the forms

The focus here is on the forms of (1) that express information about body postures (i.e., *la*, *aha'tsi*, *chumuchu*, and *tsula*), as they present facts that are relevant. The forms *mula* 'be in a closed place' and *pila* 'be in water/liquid medium' will be mentioned just briefly. First, the posture verbs *la*, *aha'tsi*, etc., will be described. Then, we will consider the posture auxiliaries.

3.1. Posture verbs

The posture forms can be found as the verb of a clause. The characteristics of Trumai verbs may be summarized as following (Guirardello 1999):

- the verb is the head of a VP;
- as the head of the VP, a verb can receive the 3ABS enclitic *-n/-e*;
- it can also be modified by auxiliaries (e.g. the Mood auxiliary *t(a)ke* 'Desiderative'), by particles (e.g. Imperative, Causation, and Negation particles), and

by adverbs. The Imperative particle for intransitive verbs is *wana*; the one for transitive verbs is *waki*;

- as the head of the VP, a verb can be modified by *ke*, when the Absolutive NP is not adjacent to it;
- some verbs can receive the prefix *wa-*, which seems to be a middle voice marker.

To exemplify these characteristics, we have the posture verb *aha'tsi*, which is intransitive, like the other posture verbs:

- (9) a. Kumaru yi aha'tsi esak-en.
Kumaru yi sit hammock-LOC
'Kumaru sat down /is sitting on the hammock.'
- b. Iyi aha'tsi-n esak-en. [3ABS enclitic]
iyi sit-3ABS hammock-LOC
'She sat down/is sitting on the hammock.'
- c. Kumaru yi aha'tsi-tke esak-en. [DESID auxiliary]
Kumaru yi sit-DES hammock-LOC
'Kumaru wants to sit/to remain seated on the hammock.'
- d. **Wana** aha'tsi! [Imperative particle]
IMP sit
'Sit down!' or 'Remain in a sitting position!'
- e. Kumaru yi ka_in aha'tsi ke esak-en. [morpheme *ke*]
Kumaru yi FOC/TENS sit ke hammock-LOC
'Kumaru (focus) sat down/is sitting on the hammock.'

We can see in the examples above that *aha'tsi* can have an active or a stative sense: 'sit down' or 'be sitting'. The same is true for *chumuchu* and *tsula*: both mean 'lie down' or 'be lying'. The situation is different for the 'standing' posture: it presents different forms for the two senses. *La* has only a stative interpretation ('be standing'), while *lakida* is the form used to express the action that leads to the state ('stand up'). Examples:

- (10) a. Ha chumuchu ka_in.
1 lie FOC/TENS
'I lie down.' or 'I am lying.'
- b. Wana chumuchu!
IMP lie
'Lie down!' or 'Remain in a lying position!'
- (11) a. Ha la ka_in.
1 be.standing FOC/TENS
'I am standing.'

- b. Wana la!
 IMP be.standing
 ‘Remain in a standing position!’
- (12) a. Ha lakida ka_in.
 1 stand.up FOC/TENS
 ‘I stood up.’
- b. Wana lakida!
 IMP stand.up
 ‘Stand up!’

‘Stand’ is also the only posture that can be expressed by means of two kinds of predicate: a verbal one (as in 11a), or a nominal one, as in (13) below. The other postures do not present such variation (and the same is true for the other two Spatial Configuration forms, *mula* and *pila*). Observe that when *la* is in a nominal predicate, it receives the prefix *wa-*, a middle voice marker. This occurrence of *wa-* is very peculiar, because this prefix normally occurs with verbs in verbal predicates.⁵ Thus, the configuration of the example below is special in several ways:

- (13) Wa-la ka_in ha chĩ.
 MV-be.standing FOC/TENS 1 COP
 ‘I am standing.’

The difference between (11a) and (13) is not obvious. When asked about it, consultants do not have a clear explanation; instead, they offer possible contexts of occurrence for the two variants, like (14) and (15) below. Apparently, *la* is used in a verbal predicate when the speaker wants to indicate the ‘standing’ posture in contrast with the other ones (i.e., ‘standing’, versus ‘sitting’ and ‘lying’). *La* would be used in a nominal predicate simply to point out how the body of an entity is oriented at the moment, in order to help the addressee to locate the entity.

- (14) Hakew, hi chumuchu-a?
 Raquel 2 lie-QUEST
 ‘Raquel, are you lying?’
 Hahak. ha la ka_in.
 no 1 be.standing FOC/TENS
 ‘No. I am standing.’
- (15) Hakew, hamuna in hi chĩ?
 Raquel where FOC 2 COP
 ‘Raquel, where are you?’
 Nina wa-la ka_in ha chĩ.
 here MV-be.standing FOC/TENS 1 COP
 ‘I am standing here.’

Perhaps we could say that the use of *la* in a verbal predicate would imply more “agentivity” in the entity maintaining the posture, in the sense that the entity chooses the ‘stand’ posture, instead of the other ones; alternatively, the occurrence of *la* in a nominal predicate would imply in less “agentivity”. However, the scenario is a little more complicated than that, because there are also examples of verbal *la* occurring in answers to ‘where’ questions (although, in the example below, the S argument is inanimate):

- (16) Hamuna in iwir a yi?
 where FOC wood DUAL yi
 ‘Where are the two sticks.’
 Tehnene-n ka_in a yi la-n.
 floor-LOC FOC/TENS DUAL yi be.standing-3ABS
 ‘The two sticks are standing on the floor.’

More analysis is still necessary to capture the exact difference between *la* in a verbal predicate and *la* in a nominal one. It is interesting to observe that *la* and *wa-la* can co-occur in the same clause:

- (17) Wa-la ka_in Atawaka yi la.
 mv-be.standing FOC/TENS Atawaka yi be.standing
 ‘Atawaka is standing.’ (speaker is describing how Atawaka is at the moment)

The main point here is that Trumai assigns special importance to the ‘stand’ posture. This may be relatable to the idea defended by Newman (this volume) that posture verbs in the languages of the world would be organized according to a hierarchy — ‘stand’ > ‘sit’ > ‘lie’ — with ‘stand’ being the posture that requires more agentivity and control by the entity maintaining it. Trumai, like some languages of the world, is sensitive to this difference in control/agentivity, and express it in its grammar. However, the ‘stand’ posture is not necessarily the default position for human beings. When Trumai speakers do not know the position of a person, they simply do not specify it; they use the copula, instead of a posture verb:

- (18) Yaw chi ka_in pike iudan.
 person COP FOC/TENS house behind
 ‘There is a person behind the house.’

Note that the posture verbs have active/stative meanings, but not a causative one. For the expression of the latter, the causative construction is required. For instance:

- (19) Kumaru-k ha lakida ka.
 Kumaru-ERG 1 stand.up CAUS
 ‘Kumaru made me stand up.’

- (20) Hai-ts axos tsula ka.
 1-ERG child lie CAUS
 'I made the child lie down (in a hammock).'

Finally, we may observe that sub-variations of a particular posture can be expressed by means of the expression *te/tsi* + body part + nominalizer.⁶ This expression comes in the first position of the clause, behaving as an adverb (cf. Guirardello 1999, chap. 3, Section 3.4, about adverbs in Trumai), and it indicates in which way specifically the position is being maintained. For instance:

- (21) Te-kuda-k ka_in axos la.
 by.means-head-NZR FOC/TENS child be.standing
 'The child is doing a hand stand.' (Lit. 'the child is standing by the head.')
- (22) Te-da dacha-k ka_in ha aha'tsi.
 by.means-leg bone-NZR FOC/TENS 1 sit
 'I am sitting on my legs (i.e., my legs are under my buttocks).'
- (23) a. Te-ma-k ka_in ha chumuchu.
 by.means-?-NZR FOC/TENS 1 lie
 'I am lying on my belly (i.e., belly is downwards).'
- b. Te-natu-k ka_in ha chumuchu.
 by.means-back-NZR FOC/TENS 1 lie
 'I am lying on my back (i.e., belly is upwards).'
- c. Tsi-eni-k ka_in ha chumuchu.
 by.means-side-NZR FOC/TENS 1 lie
 'I am lying on my side.'

3.2. Posture auxiliaries

As mentioned above, the posture forms *la*, *chumuchu*, and *tsula* can sometimes be found modifying the main verb of a clause, that is, [V Posture]. They can modify any kind of verb, and do not have any influence on the argument structure of the clause; it is the main verb that determines the case marking of the NPs, as we can see in (24)–(27).

- (24) Koinu-ø wal la ka_in.
 Koinu-ABS sing be.standing FOC/TENS
 'Koinu while standing is singing.'
- (25) Koinu-ø wapchima la ka_in Kumaru-tl.
 Koinu-ABS hug be.standing FOC/TENS Kumaru-DAT
 'Koinu while standing is hugging Kumaru.'

- (26) Koinu-k Tata-ø midoxos la.
 Koinu-ERG Tata-ABS call be.standing
 'Koinu while standing is calling Tata.'
- (27) Koinu-k axos-ø kīti la Yaka-tl.
 Koinu-ERG child-ABS give be.standing Yaka-DAT
 'Koinu while standing is giving the child to Yaka.'

One could speculate that perhaps the combination main verb + posture could be a [VV] sequence (i.e., a serial verb construction), rather than a [V Aux] sequence. However, there are good reasons for choosing the [V Aux] analysis. In Trumai, there is a set of forms that occur inside the VP, modifying the verb. These forms are found *only* in this environment. They do not present flexibility of position, like adverbs, and they are never found as the main verb of a clause; they cannot be modified by the Imperative particles either. These forms have no influence on the case marking of the NPs in the clause. They belong to a closed class. Some of them are associated with the domain of Aspect/Mood; this is the case of *k(u)ma* 'Perfective'. Others express information on spatial orientation, indicating the directionality of the event being performed; these are the directionals *k(a)tsu* 'towards river', *kahmi* 'uphill', *k(a)mu* 'downriver', among others. One of the forms expresses information on posture; this is *katsi* 'be sitting'.

These forms cannot be analyzed either as verbs or as adverbs, only as auxiliaries. Many of the forms exhibit phonological reduction, i.e., they cliticize. It is a common fact in the languages of the world that auxiliaries can cliticize. These forms could possibly be analyzed as verbal particles, given their distribution; however this analysis also brings some complications (see Guirardello 1999, Chapter 4, on this issue). With the present state of knowledge, the best analysis for these forms is to consider them auxiliaries.

If the combination main verb + *katsi* is analyzable as [V Aux], we have to propose a similar analysis for main verb + *la*, main verb + *tsula*, and main verb + *chumuchu*, given that the pattern is the same in terms of structure and semantic domain. It might be that these sequences were originally serial constructions; Payne (1997:311) points out that verbs used in serial constructions can sometimes become auxiliaries. Thus, it might be that originally the combination main verb + *posture* was in fact a [V V] construction, but currently this combination is better analyzed as a [V Aux] sequence. Kuteva (1999:192) defends the idea that posture verbs evolve into auxiliaries because of their "basicness and frequency of usage . . . which makes them appropriate sources for auxiliary structures". For more details on Trumai auxiliaries, see Guirardello 1999, Chapter 4.

As already mentioned, the posture auxiliaries of Trumai refer to the body posture of the entity that is the S or A argument of the clause (28a, 29a). When the speaker wants to refer to the position of the entity that is O or DAT argument,

posture auxiliaries are not used; rather, a subordinate clause is employed (28b, 29b).

- (28) s v AUX DAT
 a. Ha hu'tsa tsula ka_in Amati-tl.
 1 see lie FOC/TENS Amati-DAT
 'I am seeing, while lying, Amati.'
 b. s v DAT TEMPORAL CLAUSE
 Ha hu'tsa ka_in Amati-tl, [tsula-n-es].
 1 see FOC/TENS Amati-DAT lie-3ABS-TEMP
 'I am seeing Amati, who is lying.' (Lit. I am seeing Amati when he
 is lying.)
- (29) A O V AUX
 a. Hai-ts Tata midoxos tsula.
 1-ERG Tata call lie
 'I am calling, while lying, Tata.'
 b. A O V TEMPORAL CLAUSE
 Hai-ts Tata midoxos, [tsula-n-es].
 1-ERG Tata call lie-3ABS-TEMP
 'I am calling Tata, who is lying.' (Lit. I am calling Tata when she is
 lying.)

The semantic difference between a posture verb and a posture auxiliary is that (except for *la*) the verb can have both stative and active senses, whereas the auxiliary has exclusively a stative reading. For example:

- (30) s v
 Kiki yi tsula chĩ_in. [VERB: active/stative sense]
 man yi lie FOC/TENS
 'The man lay down.' or 'The man was lying.'
- (31) s v AUX
 Kiki yi otl tsula chĩ_in. [AUX: only stative sense]
 man yi sleep lie FOC/TENS
 'The man was sleeping lying.'
 (*The man lay down in order to sleep)
- (32) s v v-s
 Kiki yi tsula chĩ_in, iyi otl-e ahak.
 man yi lie FOC/TENS iyi sleep-3ABS PURP
 'The man lay down in order to sleep.'
 [for the active sense, no use of posture auxiliary; rather, a purposive
 construction is employed]

The other two Spatial Configuration forms, *mula* ‘be in a closed place’ and *pila* ‘be in water/liquid medium’ can also be found as auxiliaries (as in the previous example 4), but the semantic difference between the verb and the auxiliary is still unknown. The same is true for *la* ‘be standing’.

The ‘sitting’ posture, as already seen, has a special characteristic with regard to auxiliation: it has a form that is used exclusively as a posture auxiliary, *katsi* (33). According to one consultant, the use of *aha’tsi* ‘sit’ as an auxiliary is possible (34), but such use is not common. Interestingly, the verb *aha’tsi* and the auxiliary *katsi* can co-occur in the same clause (35), a fact that is similar to the co-occurrence of *la* and *wa-la* observed in example (17).

- (33) Ha ma katsi ka_in. [AUX *katsi*]
 1 eat be.sitting FOC/TENS
 ‘I am eating while seated.’
- (34) Ha ma aha’tsi ka_in. [*aha’tsi* as AUX (unusual)]
 1 eat sit FOC/TENS
 ‘I am eating while seated.’
- (35) Han yi in aha’tsi katsi ke? [combination VERB and AUX]
 what yi FOC sit be.sitting ke
 ‘What is that seated while seated there?’
 [speaker is pointing to an animal seated on the branch of a tree]

We could say that the co-occurrence of *aha’tsi* and *katsi* (or *la* and *wa-la*) is a signal that the two forms do not have exactly the same semantics, somewhat parallel to the co-occurrence of the verb *have* and the auxiliary *have* in English (e.g. *I have to have a car*). However, one could also argue that the combination of the ‘sitting’ forms is just redundant; i.e., perhaps the combination was originally used to produce an emphatic effect, but the effect got lost over time and the combination became merely redundant. I believe that redundancy is not what is involved here. The auxiliary *katsi* unambiguously refers to the state of sitting, while the verb *aha’tsi* is vague between the action and the state (sit/be sitting). They are not semantically equivalent; therefore their combination cannot be entirely redundant. Maybe the role of the auxiliary in (35) is to produce a narrower profile of the event, forcing then a narrower profile for the whole clause and increasing the specificity of the description (something like the difference between *my shirt is on the table* and *my red shirt is on the table* — both are accurate descriptions, but one is a little more specific than the other). However, this approach works well only for the co-occurrence of the ‘sitting’ forms. In the case of the ‘lying’ forms, the scenario is more complex, since both the verb and the auxiliary are stative only.

One could wonder whether the posture auxiliary in (35) expresses informa-

tion on aspect rather than on body posture. There are languages of the world in which posture auxiliaries can be employed to convey information on durative/progressive/continuative aspect (cf. Heine *et al.* 1993; Kuteva 1999), or be used to express habitual meanings (Newman, this volume: 12–17). Thus, it would be reasonable to ask whether Trumai posture auxiliaries are also used to express aspect meanings. However, this does not seem to be the case. When we examine the clauses in which Trumai posture auxiliaries occur and the overall contexts in which these clauses are found, we do not find clear signals that a durative/progressive/continuative aspect is involved. Moreover, when Trumai speakers want to point out that an event is in progress or extends over a period of time, they do not employ a posture auxiliary, but rather the adverb *huk'an* ‘still’ (36, 38). For the expression of events regularly performed, the aspect auxiliary *kawala* ‘habitual’ is used (37, 38), not a posture form.

- (36) Ha ma huk'an.
 1 eat still
 ‘I am still eating.’
- (37) Ha wal kawala.
 1 sing habitual
 ‘I sing regularly.’
- (38) [Patu Magru-n huk'an ha wan hilaka]-is, ha lax kawala
 Pato Magro-LOC still 1 PL live.in-TEMP 1 hunt habitual
 piŋik-es.
 monkey-DAT
 ‘When we were still living at the Pato Magro village, I used to hunt monkeys.’

But it is not always the case that *huk'an* or an overt aspect morpheme occurs. It is possible to find clauses that describe events in progress without any aspect marker:

- (39) [Ha yotl]-is chĩ_in iyi pita-n.
 1 sleep-TEMP FOC/TENS iyi go.out-3ABS
 ‘When I was sleeping, she went out.’
 [the event of sleeping was in progress; however, no aspect auxiliary here]⁷
- (40) Kumaru dat-an chĩ_in ha chĩ.
 Kumaru home-LOC FOC/TENS 1 COP
 ‘I was in Kumaru’s house.’
 Kasoro tam ha ain. inis hen ha k'ad-ki iyi make-n.
 dog COM 1 play.at.this.moment then 1 hand-DAT iyi bite-3ABS
 ‘I was playing with a dog. Then, at this moment, it bit my hand.’
 [the event of playing was in progress; it had not reached its end yet]

Note that in the situations described in (36)–(40), the event is durative/ progressive, but there is no occurrence of posture auxiliaries. If in example (40) we use an auxiliary of this type to modify the verb *ain* ‘play’, the resulting meaning still has to do with a body posture: playing while sitting, playing while lying, etc. Therefore, it is problematic to say that the posture auxiliaries of Trumai express information in the domain of aspect. On the other hand, we cannot ignore the fact that they are semantically restricted to stative interpretations. As Kuteva (1999) points out, an important factor that helps to bridge the transition of posture auxiliaries to aspect auxiliiation is the stativity of the posture forms (an event with a stative, stable spatial configuration can be reinterpreted as a durative event). Thus, it might be that the posture auxiliaries of Trumai are already in the first stages of developing aspect nuances. The co-occurrence of the ‘sitting’ verb *aha’tsi* and the ‘sitting’ auxiliary *katsi* is particularly intriguing and might be a signal that the auxiliary is acquiring a new value in the system; but if there is an aspect trace in its use, it is still very subtle and incipient. This discussion will be taken up again at the end of this chapter, after we have seen the various aspects of the Trumai posture forms.

Summarizing the information described earlier, we can say that in Trumai STATE and ACTION are treated differently across the various postures:

- they are set apart for the ‘stand’ posture: *lakida* is used only for action, *la* (verb or auxiliary) only for state;
- they are partially set apart for the ‘sit’ posture: although the verb *aha’tsi* can indicate state or action, there is a different form — the auxiliary *katsi* — that is used only for state;
- they are also partially set apart for the ‘lie’ postures: the verbs *tsula* and *chumuchu* can be used for action or state, but the auxiliaries *tsula* and *chumuchu* have exclusively a stative sense.

These points can be better visualized in Table 1 (from Guirardello 1999: Ch. 4)

Table 1. Trumai posture forms: expression of ACTION and STATE

	‘stand’		‘sit’		‘lie’	
	V	Aux	V	Aux	V	Aux
Action	<i>lakida</i>	–	<i>aha’tsi</i>	–	<i>tsula</i>	–
					<i>chumuchu</i>	–
State	<i>la</i>	<i>la</i>	<i>aha’tsi</i>	<i>katsi</i>	<i>tsula</i>	<i>tsula</i>
					<i>chumuchu</i>	<i>chumuchu</i>

A final remark about the posture auxiliaries: they occur most frequently in clauses

where the S or A argument is animate (e.g. previous example (29), whose A and O arguments are animate). With inanimate S or A, the use is a little strange. So far, it has not been observed in natural speech, and when checked in elicitation, mixed results were obtained: if O is animate, the auxiliary refers to its posture, not to the posture of the A argument (41); if O is also inanimate, the use of posture auxiliaries does not seem to be possible (42).

- (41) *Ĭwĭr ĭchna yi-k ha disi chumuchu.*
 wood branch *yi*-ERG 1 hit/kill lie
 ‘The branch of the tree hit me; I was lying.’
- (42) **Ĭwĭr ĭchna yi-k bola disi chumuchu.*
 wood branch *yi*-ERG ball hit/kill lie
 ‘The branch of the tree hit the ball.’
 [not possible, according to the consultant]

4. The uses of the posture verbs

Now that we have seen the formal (and a little of the semantic) characteristics of the Trumai posture forms, let us turn to their functional ones. In this section, the various uses of the posture verbs will be presented. Actually, we will see not only the verbs that refer to body postures, but also *mula* ‘be in closed container’ and *pila* ‘be in water/liquid medium’, since the uses described here are valid for all members of the Spatial Configuration class.

4.1. Descriptive uses

The verbs related to body posture and spatial condition can be used in clauses with a descriptive function, that is, clauses that describe the posture maintained by an entity at a specific moment. This use is frequently observed with NPs that refer to animate entities (humans and animals), but it is also possible with objects that have two or three dimensions. Examples:

- (43) *Hai-ts axos midoxos, aha'tsi ke.*
 1-ERG child call sit RLZR
 ‘I called the child, the one that is sitting’
- (44) *Hele in Atawaka yi? wana ami hai-tl.*
 how FOC Atawaka *yi* IMP speak 1-DAT
 ‘How is Atawaka? Tell me.’
iyi chumuchu-n. kama natu-n iyi chumuchu-n.
iyi lie-3ABS bed back/top-LOC *iyi* lie-3ABS
 ‘She is lying. She is lying on the bed.’

- (45) Hele in kopu yi? Wana ami hai-tl.
 how FOC glass yi IMP speak 1-DAT
 ‘How is the glass? Tell me.’
 Kopu yi aha’tsi tehnene-n.
 glass yi sit floor-LOC
 ‘The glass is sitting on the floor (in its canonical position).’

4.2. Locative uses

The Spatial Configuration verbs can also occur in clauses with a locative function, that is, clauses that are employed when the speaker wants to indicate the location of an entity. This use is often observed in answers to ‘where’ questions (46)–(47), and it is possible with both animates and inanimates NPs. The choice of a Spatial Configuration verb in a locative clause will depend on the physical characteristics of the entity and on the kind of Ground where the entity is located; see Section 5 for more details.

- (46) Hamuna in tar.hunhunke yi?
 where FOC spider yi
 ‘Where is the spider?’
 Esak fax-on ka_in iyi tsula-n.
 hammock viscera-LOC FOC/TENS iyi lie-3ABS
 ‘It is/lies in the hammock.’
- (47) Hamuna in lat’oxo yi?
 where FOC bowl yi
 ‘Where is the bowl?’
 Misu-n ka_in lat’oxo yi pila.
 river/water-LOC FOC/TENS bowl yi be.in.liquid
 ‘The bowl is in the river.’

It is important to observe here that the use of the Spatial Configuration-verb construction is not the only way of answering ‘where’ questions in Trumai. There is also a copular construction (with a subtype for 3rd person NPs, the zero-copula construction), which is frequently used. Examples:

- (48) Hamuna in hi chī?
 where FOC 2 COP
 ‘Where are you?’
 a. Ni ka(_in) ha aha’tsi. [one possible answer]
 here FOC/TENS 1 sit
 ‘I am sitting here.’

- b. Ni ka(_in) ha chĩ. [another possible answer]
 here FOC/TENS 1 COP
 ‘I am here.’

The interplay between this construction and the Spatial Configuration-verb construction is still not entirely clear. For the location of non-moveable entities — such as trees, houses, villages, lakes — the use of Spatial Configuration verbs is almost obligatory: in my corpus, there are numerous spontaneous examples with the Spatial Configuration verbs (49)–(50), and very few instances with copula/zero-copula (51). For the location of moveable things, there is much more variation in the answers provided by the Trumai speakers: sometimes the verb-construction is used, sometimes the zero-copula (52).

- (49) Anaria xuik ka_in su suxdi xu pila.
 Anaria near FOC/TENS water milky lake be.in.liquid
 ‘The “Milky Water” lake is near Anaria.’
- (50) Kaina ka_de(_in) Trumai hilaka-ʔ chumuchu le.
 there FOC/TENS Trumai village-NZR.EX lie hearsay
 ‘The old Trumai village was lying there.’
- (51) Pavuru xuik [ha hilaka yi] Ø.
 Pavuru near 1 village yi
 ‘My village is near Pavuru.’
- (52) Hamuna in [urumach yi]?
 where FOC pot yi
 ‘Where is the pot?’
- a. Ei natu-n [urumach yi] Ø. [spontaneous answer]
 stump back/top-LOC pot yi
 ‘The pot is on the tree stump.’
- b. Ei natu-n [urumach yi] tsula. [another possible answer]
 stump back/top-LOC pot yi lie
 ‘The pot lies on the tree stump.’

4.3. Existential uses

The Spatial Configuration verbs can occur in clauses with a presentative function, i.e., these clauses introduce an entity by asserting its existence. Structurally, the Trumai existential clause is not different from the locative one. It is the fact that the entity is still unknown to the listener that makes the clause have an existential interpretation.⁸ The relationship between locative and existential clauses in Trumai is not unusual. Culioli (1995:150) points out that existential predicates

can be seen as a kind of abstract localization. Clark (1978) also proposes a locative basis for both existential and locative constructions. Other languages of the world exhibit the combination of locative and existential predication, such as the Mayan language Tzeltal (cf. Brown to appear).

- (53) a. Ni ka_in hai-kte tahu chumuchu.
 here FOC/TENS 1-GEN knife lie
 ‘My knife is here.’
 [entity is already known/identifiable: locative sense]
- b. Ni ka_in tahu chumuchu.
 here FOC/TENS knife lie
 ‘There is a knife here.’
 [entity is unknown/not identifiable: existential sense]
- (54) a. Misu mal-an ka_in ha dat yi la.
 river/water edge/lip-LOC FOC/TENS 1 house/home yi stand
 ‘My house is near the river.’
 [entity is already known/identifiable: locative sense]
- b. Ina tsi-le de pike t’ox yi la le.
 there tsi-hearsay already house build yi stand hearsay
 ‘People say that there was a house there.’
 [entity is unknown/not identifiable: existential sense]

A clause with posture verb in the negative modality can equally have an existential or a locative sense, depending on the context and identifiability of the entity:

- (55) Tsula tak ka_in tar.hunhunke kama natu-n.
 lie NEG FOC/TENS spider bed back/top-LOC
 ‘There is no spider on the bed.’
 [this clause could also be interpreted as: The spider is not in the bed.]

However, for expressing the non-existence of an entity, speakers of Trumai more frequently employ another construction, which involves the use of the postposition *nik* ‘without’ (examples (56)–(57)); although (57a) is possible, (57b) is the type more frequently attested); this construction has exclusively a negative existential interpretation.

- (56) Tar.hunhunke nik ka_in kama natu-n.
 spider without FOC/TENS bed back/top-LOC
 ‘There is no spider on the bed.’ (Lit. (It) is without spider on the bed.)
- (57) a. Katat nik ka_in katat chī esak fax-on.
 bottle without FOC/TENS bottle COP hammock viscera-LOC
 ‘There is no bottle in the hammock.’
 (Lit. ‘Bottle is without bottle in the hammock.’)

- b. Katat nik ka_in esak fax-on.
bottle without FOC/TENS hammock viscera-LOC
'There is no bottle in the hammock.'
(Lit. '(It) is without bottle in the hammock.')

Thus, there is an asymmetry in the system of Trumai with regard to the expression of existentiality, given that the affirmative modality does not present a construction that has only an existential sense. The important point here is that when Trumai speakers want to express non-existentiality of entities, they most likely will employ the construction with *nik* (which is unambiguous about existence), and not the Spatial Configuration-verb construction (which can have existential or locative interpretations).

5. The semantics of the forms

In this section, we will have a more careful look at the semantic content of the members of the Spatial Configuration class. First, the semantics of each form will be described; after that the class as a whole will be analyzed.

5.1. Semantics: individual forms

For the semantic analysis of each form, I will use the terms *Figure* and *Ground* introduced in Section 2. When I talk about Ground for *la*, *aha'tsi*, *chumuchu*, and *tsula*, bear in mind that the Ground is neither a liquid medium nor a closed place (e.g. a closed box); the Ground will be other kinds of location, such as: table, chair, bench, bed, hammock, stone, floor, tree branch, open containers without water (such as bowls, pans, etc.) and so on.

5.1.1. *La*

At first sight, *la* seems to be linked to vertical orientation: this form is used to describe the posture of a human being standing, i.e., the person is vertically straight and supported by the feet, which make contact with the floor or earth. *La* is also used when the Figure is an animal with four legs and a flexible body, and the animal's legs are all straight and vertically oriented (i.e., only the paws make contact with the floor); *la* is equally employed for birds whose legs are straight and vertical.⁹

If the Figure is a moveable inanimate entity, the use of *la* is possible only when the object is bidimensional, and one of its two dimensions is longer than the other, i.e., the object has an elongated shape (e.g. a knife, ruler, stick, etc.); *la* is employed when the longer axis is vertically oriented (example 58). *La* can also be

applied for pieces of furniture that have four legs, like chairs and tables (59); this use is probably an extension of the occurrence of *la* for animals with four legs. For beds, although the use of *la* is not considered wrong, speakers prefer *chumuchu* ‘lie’, probably because the horizontal length of a bed is much longer than the other dimensions. Finally, *la* can be used for non-moveable inanimate entities that have a longer dimension vertically oriented: houses (previous example 54), trees (60), and other plants that grow vertically, such as corn, sugar-cane, etc.

- (58) Tehnene-n tahu yi la.
 floor-LOC knife yi be.standing
 ‘The knife is standing on the floor.’ (it is inserted into the floor)
- (59) Pike t’ox wela-n ka_in mesa la.
 house building center-LOC FOC/TENS table be.standing
 ‘The table stands in the center of the house.’
- (60) Ha dat iudan ka_in tsinon yi la.¹⁰
 1 house/home behind FOC/TENS pequi yi be.standing
 ‘The pequi tree stands behind my house.’

As we can see, the cases described above suggest that *la* is used to express the vertical orientation of a Figure; but it is also important to notice that the Ground in these cases — in general, the floor or earth — is horizontal. However, *la* is not restricted to that; it can also occur with situations in which the Ground is vertically oriented and the Figure is horizontally oriented. That is the case of a nail in a wall, a knife inserted into the trunk of a tree, a cigarette in the mouth of a person, a hammock that is tied to posts and ready to be used. Examples:

- (61) Kupits’u-n ka_in pregu la.
 wall-LOC FOC/TENS nail be.standing
 ‘The nail stands in the wall.’



- (62) Ni ka_in ha ka’sa la.
 here FOC/TENS 1 hammock be.standing
 ‘My hammock stands here.’



Therefore, the semantics of *la* does not involve verticality, but rather *perpendicularity* of the Figure in relation to the Ground: if the Ground is horizontal, the Figure is vertically oriented (hence the sense of ‘standing’ in many examples); if the Ground is vertical, the Figure is horizontally oriented. The form *tsula* can also be used for situations in which the Ground is vertical (e.g. a fly on a wall). The difference between *tsula* and *la* is that in the case of *la*, the Figure is perpendicular to the Ground, while in the case of *tsula*, the Figure is parallel to it (see Section 5.1.4).

La encodes not only perpendicularity in relation to the Ground, but also steadiness of the Figure. This is suggested by the difference between *la* and *tonela* ‘hang/drape’: *tonela* sometimes can be used to describe situations in which the Figure is perpendicular to the Ground, for example a lamp hanging from the roof.¹¹ *La* can also describe Figures on the roof, but it would not be used to refer to the configuration of the lamp; rather, it would be used for the position of a light bulb directly attached to a metal frame on the roof. In the case of *tonela*, the Figure (lamp) has its main part free and can move or oscillate, while with *la* the Figure (bulb) is fixed and stable.

A final observation with regard to *la* is that although the essential semantic feature of this form is to indicate perpendicular orientation (i.e., Figure-Ground relation), it also provides information about the kind of Figure being described. For animals, the use of *la* indicates that the animal has a flexible body; for moveable inanimate entities, its use indicates that the Figure has (or at least, is perceived as having) an elongated shape.

5.1.2. *Aha'tsi*

Aha'tsi is the form that can be glossed as ‘sit’. When the Figure is a human being, *aha'tsi* is used for the cases in which the body of the Figure is in a relatively compact position (i.e., there is no major axis), and the buttocks are in contact with the Ground; the same is true for animals with four legs and a flexible body. *Aha'tsi* is not employed for animals with two legs, such as a chicken; rather, *chumuchu* ‘lie’ is the form employed, maybe because when a bird sits in a place, an extensive part of its body makes contact with the Ground:



The scene represented above is expressed in Trumai as:

- (63) Karakarako yi chumuchu.
 chicken yi lie
 ‘The chicken is lying (on the floor).’

If the Figure is a moveable inanimate entity, the use of *aha'tsi* is possible only when the object has three dimensions and a base (e.g. a bottle, a pot, a bowl); *aha'tsi* is used when the object is in its canonical position, that is, the base is in contact with the Ground (64). It is interesting to observe that when there are several three-dimensional objects of the same kind, but in different orientations, *aha'tsi* still can be employed to give a general description of the scene (65a); if the

speaker wants to be more precise, s/he can describe each object separately (65b). Finally, we observe that *aha'tsi* does not occur with any non-moveable entity (this use is not attested so far).

- (64) Katat yi aha'tsi mesa natu-n.
 bottle yi sit table back/top-LOC
 'The bottle sits on the table.'
- (65) a. Mesa natu-n ka_in katat yi aha'tsi.
 table back/top-LOC FOC/TENS bottle yi sit
 'The bottles sit on the table.' (3 are in canonical position, 3 are lying)¹²
 b. Inde yi aha'tsi katsi. inde yi chumuchu.
 that yi sit be.sitting that yi lie
 'Those ones are sitting (i.e., canonical position), those ones are lying.'

In sum, *aha'tsi* describes the posture of a Figure in a relatively compact position whose buttocks/base touches the Ground which gives support to the Figure (*aha'tsi* does not describe Figures on vertical Grounds, on surfaces against the force of gravity, or in the air).¹³ Similarly to *la*, the essential feature of *aha'tsi* is to indicate orientation, but it can also indirectly provide some information about the Figure: for animals, the use of *aha'tsi* indicates that the animal has four legs; for moveable inanimate entities, it signals that the Figure is three-dimensional with a base.

5.1.3. *Chumuchu*

The semantics of *chumuchu* is related to horizontal orientation. For human Figures and animals with four or two legs, *chumuchu* is used when the person or animal is horizontally oriented, and the whole body — or a good extension of it — makes contact with the Ground.

While *la* and *aha'tsi* cannot be used for an animal whose body does not present major variations of posture, *chumuchu* can. This is the posture form for animals with a rigid body (e.g. turtles, crabs), reptiles (e.g. snakes, lizards), batrachia (e.g. frogs and toads), and insects (e.g. spiders, cockroaches). However, *chumuchu* can be used only for the cases in which the Ground is horizontal and gives support to the Figure; if the Ground is vertical (as in 66), *chumuchu* cannot be used; rather, *tsula* is employed (see Section 5.1.4). When the belly of the animal is upwards — a possible sub-variation of posture for these animals — the expression *tenatuk* 'on the back' is used (67b).

- (66) *Kupits'u-n ka_in meru chumuchu.
 wall-LOC FOC/TENS fly lie
 (The fly is on the wall)

- (67) a. Tehnene-n tsul yi chumuchu.
 floor-LOC river.turtle *yi* lie
 'The river turtle lies on the floor.'
- b. Te-natu-k ka_in tsul yi chumuchu.
 by.means-back-NZR FOC/TENS river.turtle *yi* lie
 'The river turtle is lying on its back.'

Chumuchu is also regularly used to describe the configuration of moveable inanimate entities. It can be used with any kind of object: unidimensional (e.g. ball), two-dimensional (e.g. ruler), three-dimensional with a base (e.g. bottle). For two-dimensional entities, *chumuchu* is applied to the cases in which the major axis of the object is horizontally oriented (69); for three-dimensional entities, *chumuchu* is used when the object is not in its canonical position: it is on its side (70) or it is upside down (71).

- (68) Mesa natu-n ka_in pola yi chumuchu.
 table back/top-LOC FOC/TENS ball *yi* lie
 'The ball is on the table.'
- (69) Mesa natu-n ka_in iwir yi chumuchu.
 table back/top-LOC FOC/TENS stick *yi* lie
 'The stick is on the table.'
- (70) Yuduṭ natu-n kopu yi chumuchu.
 bench back/top-LOC glass *yi* lie
 'The glass is on the bench, lying on its side.'
- (71) Kadeira natu-n atlat yi chumuchu.
 chair back/top-LOC clay.pan *yi* lie
 'The clay pan is upside down on the chair.'

Another possible way of expressing that a three-dimensional object is upside down is to use the word *temak*. As already seen in example (23), *temak* can also be employed for human beings with the sense of 'to lie on the belly'. With objects, the occurrence of *temak* seems to create special conditions for the use of the posture forms, because when *temak* is applied to three-dimensional objects, there is variation of the posture form that occurs in the clause (72)–(73) — a fact that is not observed in other contexts. Perhaps such variation occurs because *temak* already does the job of indicating the 'upside down' position; in this case, the semantic contribution of the posture form used for the description of the scene would become less important.

- (72) a. Te-ma-k atlat paṭ yi aha'tsi.
 by.means-?-NZR clay.pan small *yi* lie
 'The clay pan is upside down.'
 [according to consultant 1]

- b. Te-ma-k atlat paṭ yi chumuchu.
 by.means-?-NZR clay.pan small yi lie
 ‘The clay pan is upside down.’
 [according to consultant 2]
- (73) a. Te-ma-k katat yi aha’tsi.
 by.means-?-NZR bottle yi lie
 ‘The bottle is upside down.’
 [according to consultant 1]
- b. Te-ma-k katat yi la.
 by.means-?-NZR bottle yi lie
 ‘The bottle is upside down.’
 [according to consultant 2]

Chumuchu can be used for non-moveable inanimate entities that are spread out in the horizontal axis: villages (previous example 50) and ground plants, such as watermelons and pumpkins:

- (74) Ha dat iudan ka_in malasia tawasi chumuchu.
 1 house/home behind FOC/TENS watermelon plantation lie
 ‘The watermelon plantation is behind my house.’

One peculiarity of *chumuchu* is that it is not possible to use it when the Ground object is a hammock; that is, if a person or animal is lying on a hammock, only the use of *tsula* ‘lie’ is possible for describing the scene. For moveable inanimate entities that are in a hammock, *tsula* is also the only form allowed. This point will be further discussed in the description of *tsula*.

Summarizing what was said above, for human beings, animals, and two-dimensional objects, *chumuchu* is the form that describes a Figure in a horizontal orientation. The whole body (or at least a big portion of it) touches the Ground, which is equally horizontal and which gives support to the Figure. For three-dimensional objects, *chumuchu* describes a non-canonical position. In the case of unidimensional objects, which do not have a major axis or change position, *chumuchu* is used because ‘lying’ is the default posture for them. Probably ‘lying’ is less marked than the other postures, which require more physical effort to be maintained (cf. Newman this volume); being less marked, ‘lie’ is the body configuration assigned to entities that do not really *assume* a posture (since they are naturally in the configuration they have).

Could we say that *chumuchu*, besides indicating spatial configuration, also provides some information about the Figure, like *la* and *aha’tsi*? Considering that *chumuchu* occurs with all sorts of animals and moveable inanimate entities, it is not very informative to know that a specific entity allows the use of *chumuchu*. However, if we learn that this entity can *only* accept *chumuchu*, then we get some

information about the nature of the Figure. For an animal, the exclusive use of *chumuchu* means that the body of the animal is not able to present radical variations of posture; for a moveable inanimate entity, it means that the objects is classified as unidimensional.

Finally, given its relationship with *tsula*, *chumuchu* can also indirectly provide information about the kind of Ground, that is, for objects the use of *chumuchu* in general implies that the object is located on the floor, not on a higher Ground, as we will see in more detail in the next section.

5.1.4. *Tsula*

This is the hardest form to analyze semantically. *Tsula* is linked to the description of a body position, the ‘lying’ posture; however, its crucial semantic component does not seem to be that, but rather information about kind of Ground.

When the Figure is a human being, *tsula* cannot be used if the Figure is standing or sitting; as we have seen, in these situations *la* and *aha’tsi* are used. The same applies for animals with four legs. These facts suggest that *tsula* has the same semantics as *chumuchu*, but that is not true.

Tsula refers to Grounds that are *not at the floor level*; this is the basic condition. If the Figure is on the floor, the use of *tsula* is not possible (75). The Ground can be in the horizontal or in the vertical orientation, in favor or against the force of gravity (76)–(78). The whole body of the Figure — or at least a good extension of it — is in contact with the Ground, but not necessarily supported by it; *tsula* can be used for cases where the Figure is not supported by gravity against its Ground, as in (78).¹⁴

- (75) Tehnene-n ka_in kamisa yi chumuchu.
 floor-LOC FOC/TENS shirt yi lie
 ‘The shirt is on the floor.’
 *Tehnene-n ka_in kamisa yi tsula.
 floor-LOC FOC/TENS shirt yi lie
 (The shirt is on the floor.)
- (76) Mesa natu-n kamisa yi tsula.
 table back/top-LOC shirt yi lie
 ‘The shirt is on the table.’ [horizontal Ground]
- (77) Atelt’akela yi tsula kupits’u natu-n.
 snail yi lie wall back/top-LOC
 ‘The snail is on the wall.’ [vertical Ground]
- (78) Tar.hunhunke yi ka_in tsula ke pike xotlta-n.
 spider yi FOC/TENS lie ke house ceiling-LOC
 ‘The spider is on the ceiling.’ [Ground against gravity]

As we already have seen, not only *tsula* can be used to describe Figures on a vertical surface or on a surface against the force of gravity. *La* ‘stand/be in perpendicular orientation’ and *tonela* ‘drape/hang’ also can. What makes *tsula* different from *la* and *tonela* is the fact that with *tsula* the whole body of the Figure is in contact with the Ground, not only part of it. In the case of *la*, only the feet or end point of the Figure touches the Ground, because the Figure is perpendicular to it, not parallel. In the case of *tonela*, only the upper part of the Figure touches the Ground, and the rest of the body is free (79); however, the difference between a scene described by *tsula* and a scene described by *tonela* can sometimes be very subtle (80).

- (79) Yaw mut yi ka_in tonela ke atelok-an.
 person clothing yi FOC/TENS hang ke hook-LOC
 ‘Somebody’s coat is hanging on the hook.’
 [only the very top of the coat is in contact with the hook; the rest is free]
- (80) a. Kupits’u-n ka_in tsifan i’an yi tsula ke.
 wall-LOC FOC/TENS thing simulacrum yi lie ke
 ‘The paint is on the wall.’
 [the paint is fixed, attached to the wall]
- b. Yaw i’an yi ka_in tonela ke kupits’u-n.
 person simulacrum yi FOC/TENS hang ke wall-LOC
 ‘The portrait of somebody is on the wall.’
 [the “body” of the portrait is free/loose; only the top is really fixed]

Given that *tsula* can be used for situations where both the Ground and the Figure are horizontal, the result is that *tsula* and *chumuchu* overlap in some scenarios (81); that is why the speakers often oscillate between using the two forms. However, Trumai consultants say that when the Figure is an object located in the non-floor level, the use of *tsula* is preferred. This is especially true when the Ground is a tree.

- (81) a. Kama natu-n Atawaka chumuchu.
 bed back/top-LOC Atawaka lie
 ‘Atawaka is lying on the bed.’
- b. Kama natu-n Atawaka tsula.
 bed back/top-LOC Atawaka lie
 ‘Atawaka is lying on the bed.’
- (82) İwİR i aṭo-n pola yi tsula.
 wood plant arm-LOC ball yi lie
 ‘The ball is on a branch of the tree.’

Thus, it seems that when the Figure is inanimate, the difference between *chumuchu* and *tsula* becomes more salient: *chumuchu* for objects lying on the floor, *tsula* for objects at other locations. When the Figure is animate, the difference is less marked, being just a matter of choice by the speaker. The question then is: what leads the speaker to select one form over the other? Apparently, the choice is made depending on which aspect of the spatial configuration of the Figure one wants to focus on. According to Trumai consultants, when *chumuchu* is used, the focus is on the lying posture of the Figure (83a); when *tsula* is employed, the focus is on the fact that the Figure is in a place that is not the floor (83b). Example (84) illustrates this semantic difference between the two forms.

- (83) a. Ĭwir i aʈo-n axos chumuchu.
 wood/tree plant arm-LOC child lie
 ‘The child is lying on a branch of the tree.’
 [focus on the fact that the child is lying]
- b. Ĭwir i aʈo-n axos tsula.
 wood/tree plant arm-LOC child lie
 ‘The child is lying on a branch of the tree.’
 [focus on the fact that the child is on a high place]
- (84) a. Wana chumuchu!
 IMP lie
 ‘Lie down (on the table)!’
 [situation: the child is standing on the table, and I want her *to change position*]
- b. Wana tsula!
 IMP lie
 ‘Lie (on the table)!’
 [situation: the child is on the floor, and I want her *to climb on the table*.]

Another fact that suggests that *tsula* expresses information about the kind of Ground is the fact that this form is phonologically similar to *pila* and *mula*, whose semantics certainly involve Ground, as we will see in the next sections. We also observe that *tsula* is the form used for situations in which *la* and *chumuchu* cannot be applied because the Figure is not clearly oriented vertically or horizontally:

- (85) Ha pits'-an ka_in meya tsula.
 1 foot-LOC FOC/TENS sock lie
 ‘The sock is on my foot.’
 [the sock covers the foot (horizontal) and part of the leg (vertical)]

It is interesting to observe that the Ground typically associated with *tsula* is a hammock. When human beings or animals are horizontally positioned in a hammock,

only *tsula* can be employed; *chumuchu* is not allowed.¹⁵ For inanimate entities that are in a hammock, *tsula* is the only form used, even for objects that allow the use of *aha'tsi* in other contexts (e.g. a bottle). When objects are in a hammock, they are treated all in the same way, independent of their dimensions. The explanation given for this is that objects in a hammock cannot assume various positions, but only one, the lying posture. According to a consultant, *tsula* is the form used for a bottle in a hammock because a bottle can hardly stand on this kind of Ground, given that a hammock moves a lot. This is a fact about hammocks: they are unstable Grounds; an entity hardly keeps its stability inside one (human beings can sit on hammocks, but to stand is much more difficult). Thus, the posture that is naturally assumed on an unstable Ground is the 'lying' one, since this posture does not require special effort to be maintained (cf. Newman, this volume).

We could then say that the main role of *tsula* is to provide information about the Ground, but it can also indirectly (pragmatically) imply the 'lying' posture:

- Ground is unstable: Figure assumes the posture that is the easiest to maintain (=lie);
- Ground is stable: *tsula* describes a configuration in which the whole body of the Figure is in contact with the Ground, and the Figure is parallel to it. If the Ground is horizontal and supports the Figure, then the Figure is horizontal too. This condition coincides with the 'lying' posture described by *chumuchu*.

In some sense, the semantics of *tsula* evokes the idea of gravity and the effects it can have on a Figure; this is more noticeable in the situation where the Figure is not supported by gravity against its Ground (e.g. insect on the ceiling). Observe that *tsula* describes the configuration of entities on Grounds that are not on the floor level, maybe because on these Grounds the effect of gravity becomes more visible (one may always fall from a high place). This point will be taken up again in Section 5.2.

Concluding this section, could we say that *tsula* gives indirectly some information about the Figure, like *chumuchu*? We could say so: the Figures that only allow the use of *chumuchu* (not *la* or *aha'tsi*) can actually also take *tsula*, given the overlap between the two forms; but this is the only possible alternative for these kinds of Figures. Thus, if an animal or object only accepts *tsula* besides the use of *chumuchu*, we still have some sort of information about the Figure: it is an animal whose body does not present variations of posture, or it is an object that is unidimensional.

5.1.5. *Pila*

The semantics of *pila* is linked to 'liquid medium'. *Pila* is used when a Figure is in water or another kind of liquid. A good extension of the body has to be in contact with the water, otherwise other forms can be used (86). The physical characteris-

tics of the Figure are not relevant: *pila* can occur with humans, animals, and objects of any kind.

- (86) a. Misu-n ha adifle pila.
 river/water-LOC 1 sister be.in.liquid
 ‘My sister is in the river.’
 b. Misu mala-n ha adifle la.
 river/water edge-LOC 1 sister be.standing
 ‘My sister is standing on the edge of the river.’
 [only her feet touch the water; the rest of the body is outside]

The postures of entities inside the water are not distinguished (i.e. ‘lying’ vs. ‘standing’ vs. ‘sitting’); they are all described by *pila*. The only possible variations in the position of the Figure are with regard to the area of the water where the Figure is (i.e., floating on the surface of the water, under the water); this kind of variation can be indicated by the NP-location, but *pila* is still the form employed (87a,b,c). The only exception is when the Figure is under the water and at the bottom of a river: in this case *chumuchu* is used, because the Ground now is not the water, but the bottom of the river itself, which is just like the floor (87d).¹⁶ This exception suggests that the semantics of *pila* is not exactly ‘be immersed in water’, but rather ‘be suspended in water’.

- (87) a. Misu-n ka_in [yaw mut perew yi] pila.
 river/water-LOC FOC/TENS person clothing piece *yi* be.in.liquid
 ‘The piece of somebody’s clothing is in the river.’
 b. Misu natu-n ka_in [yaw mut perew yi] hoṭe hoṭe
 river/water back-LOC FOC/TENS person clothing piece *yi* float float
 pila.
 be.in.liquid
 ‘The piece of somebody’s clothing is floating on the surface of the river.’
 c. Misux apudan ka_in [yaw mut perew yi] pila.
 river under FOC/TENS person clothing piece *yi* be.in.liquid
 ‘The piece of somebody’s clothing is in the river, under the water.’
 [but not at the bottom of the river]
 d. Misux apudan ka_in [yaw mut perew yi] chumuchu.
 river under FOC/TENS person clothing piece *yi* lie
 ‘The piece of somebody’s clothing is at the bottom of the river.’

Example (88) is a good illustration of the fact that the Ground of *pila* is a liquid medium: the container is the same in both situations — a bowl — but if it is empty, *tsula* is employed. If the container is filled with water, then the use of *pila* is required:

- (88) a. Basia fax-on ka_in [yaw mut perew yi] tsula.
 bowl bottom-LOC FOC/TENS person clothing piece yi lie
 'The piece of somebody's clothing is in the bowl, which is dry.'
- b. Basia fax-on ka_in [yaw mut perew yi] pila.
 bowl bottom-LOC FOC/TENS person clothing piece yi be.in.liquid
 'The piece of somebody's clothing is in the bowl, which has water.'

Another possible use of *pila* is for describing cases in which the Figure is water or a liquid, and the Ground is not a container (89). If the water/liquid is in a container, other forms are used: *aha'tsi* for open containers, *mula* for closed ones:

- (89) Mesa natu-n kafe su pila.
 table back/top-LOC coffee juice be.in.liquid
 'The coffee (liquid) is on the table, spread.'
- (90) Kopu faxo-n kafe su aha'tsi.
 glass viscera-LOC coffee juice sit
 'The coffee (liquid) is in the glass.'
- (91) Gahafa termika-n kafe su mula.
 bottle thermal-LOC coffee juice be.in.closed.place
 'The coffee (liquid) is in the thermal bottle.'

One could wonder if the use of *aha'tsi* for a liquid in an open container has to do with the fact that the container itself is a three-dimensional object in canonical position; that is, the container "sits", and therefore the water inside of it — which assumes its shape — also "sits". However, *aha'tsi* is also used for liquids in objects that do not "sit", such as a spoon (spoons in Trumai "lie"). Maybe the use of *aha'tsi* for liquids started with storage spaces that were three-dimensional, and later the use was extended to other sorts of containers, becoming then the conventional way of expressing this kind of location for liquids. This Figure/Ground reversal (container sits > liquid sits) is observed in other languages of the world, such as Tzeltal (Brown 1994) and Tzotzil (Haviland 1992). The scenario in Tzeltal is even more interesting, because the reversal is observed with other kinds of objects, not only liquids (e.g. *waxal* can be used for a bucket canonically standing on a table *or* for corn in a bucket canonically standing; Brown 1994:772–6).

Finally, *pila* is used to indicate the location of lakes (as in the previous example 49) and rivers:

- (92) Posto xuik ka_in Tuatuari xut pila.
 office near FOC/TENS Tuatuari river be.in.liquid
 'The Tuatuari River is close to the government's office.'

Thus, *pila* describes a configuration in which either the Ground or the Figure is a liquid. If the Figure is the liquid, *pila* then indicates that the Ground is not a container and the water is somehow spread or loose in its form. The semantic content of *pila* could be defined in this way: ‘being in a liquid, suspended’ or ‘being spatially like a liquid’.

5.1.6. *Mula*

In some instances, *mula* means ‘live with’, as in (93); it can also mean ‘to be in seclusion’ (94):

- (93) Di tak huk'an Kokaro-is tsi-u tam iyi
 have.woman NEG still Kokaro-TEMP 3POSS-father COM iyi
 mula-n.
 live.with-3ABS
 ‘When Kokaro was not married yet, he used to live with his father.’

- (94) In t'atske hen kiki yi mula.
 it after then man yi be.in.seclusion
 ‘Then, the man stays in seclusion.’
 [when boys start becoming adults, they have to stay in seclusion for a
 period of time]

However, more often *mula* is used to describe entities being located in closed areas. The Ground can be a closed box, a bag, a pocket, a folder, a wardrobe, a house, etc. *Mula* occurs with all kinds of entities, and the body position of the Figure inside of the closed place is not relevant:

- (95) Pike-n ka_in Yakairu mula.
 house-LOC FOC/TENS Yakairu be.in.closed.place
 ‘Yakairu is in the house.’ [her posture is not encoded]

Mula indicates that the Figure is inside of the Ground, being surrounded by it (96). In some cases, there might be an opening in the place, but the Figure is only partially visible (97). There are also situations in which the Ground is not physically a completely closed area, but for some reasons the Figure inside of it cannot be seen; then, the Ground is treated as if it were closed (98). Thus, it seems that ‘non-visibility’ or ‘low-visibility’ is an important component in the semantics of *mula*.

- (96) Meya-n ka_in ha pits' mula.
 sock-LOC FOC/TENS 1 foot be.in.closed.place
 ‘My foot is in the sock.’
 [see the contrast between this example and (85) previously presented]

- (97) Morokore'a yi ka_in mula ke owow-an.
 owl yi FOC/TENS be.in.closed.place ke hole-LOC
 'The owl is inside of the hole (of a tree).'
 [the owl is only partially visible]
- (98) Jaha fax-on ka_in tahu paṭ mula.
 jar viscera-LOC FOC/TENS knife small be.in.closed.place
 'The knife is inside of the jar.'
 [the jar is not closed, but it is tall and I cannot see the knife inside of it.
 I just know it is there.]

As we can see, *mula* expresses information not about spatial orientation, but about kind of Ground: *mula* means 'be in a closed area'. This sort of Ground has some effects on the Figure, since its visibility is reduced or blocked; perhaps *mula* could be better defined as 'be in a place that blocks vision, most likely a closed area'. Note that a person in seclusion is isolated from social life, being also not visible for the public.

It is interesting that similar remarks can be made about *pila*, which equally expresses information about the Ground: the condition of the Figure described by *pila* is also special, because of the kind of Ground where it is. When a body is in water, the effect of the force of gravity is different. *Tsula* also evokes the effects of gravity on the Figure, as already mentioned. Thus, it seems that the forms ending in *-la* have something in common in their semantics. This point will be further discussed in Section 5.2.

5.1.7. Summary

The semantics of the Spatial Configuration forms can be organized in the following schema (where the information conveyed by each form is presented):

[Figure + spatial orientation]	[Figure + spatial orientation+Ground]	[Figure or Ground]	[Ground]
la aha'tsi	chumuchu tsula	pila	mula
<i>la:</i>	Figure + spatial orientation		
	F: human — animal with a flexible body inanimate: bidimensional, elongated		
	SO: longest axis is perpendicular in relation to the Ground Figure is stable (when the Ground is vertical or against gravity, the Figure is fixed)		
<i>aha'tsi:</i>	Figure + spatial orientation		
	F: human — animal with a flexible body and four legs inanimate: tridimensional; it clearly has a base		

- SO: human, animal: compact position — buttocks in contact with the Ground
 inanimate: object is in canonical position (base in contact with the Ground)
 Figure is supported by the Ground.
- chumuchu*: **Figure + spatial orientation + Ground**
 F: human — animal (any kind)
 inanimate: any kind (1dimension, 2dimensions, 3dimensions)
 SO: human, animal, 2dimension objects: longest axis is horizontal
 3dimension objects: non-canonical position
 G: typically floor level
 other levels also possible, if Ground is horizontal and supports Figure
- tsula*: **Figure + spatial orientation + Ground**
 F: human — animal (any kind)
 inanimate: any kind (1dimension, 2dimensions, 3dimensions)
 SO: Figure is parallel to the Ground
 if Ground is unstable: the posture assumed is the easiest to maintain (=lie)
 G: not floor level
- pila*: **Figure OR Ground**
 F: water not in a container
 G: liquid medium; Figure is suspended in the liquid
- mula*: **Ground**
 G: closed place

5.2. Semantics: the Spatial Configuration class

As mentioned in Section 2, there is a syntactic motivation for saying that *la*, *aha'tsi*, *chumuchu*, *tsula*, *pila*, and *mula* compose a formal class. Semantically speaking, would they also compose a unified class? This is a little more difficult to determine; all the forms clearly have spatial meanings, expressing information about the configuration of an entity. However, if this were the crucial factor that unifies them, we would expect other forms to be also in the class (e.g. be leaning, be inserted, be twisted, be attached, etc.), which is not the case, since 'leaning', 'inserted', etc., are adjectives in Trumai, i.e., they belong to a different class. Although the term "Spatial Configuration" is a possible label for the class analyzed here, clearly more research is necessary to capture the exact semantic feature that uniquely specifies this class.

So far, what we can say about the Spatial Configuration class is that there are semantic elements in common among its members: three of them — *la*, *aha'tsi*, and *chumuchu* — describe spatial orientation, specifying how the relationship between Figure-Ground is configured. The other three — *tsula*, *pila*, and *mula* —

describe Figures in specific kinds of Grounds, providing information on spatial location. Of all these forms, *tsula* is the most complex, because it provides information both on Ground (not floor level) and on orientation (Figure parallel to Ground).

Another aspect that the forms have in common is that they not only convey information on orientation/Ground, but they also tell something about the physical condition of the Figure. *La*, *aha'tsi*, and *chumuchu* indicate this in the sense that certain postures demand more physical effort to be maintained than others; also, they involve different parts of the body as the active zone, as Newman (this volume) points out. *Tsula*, *pila*, *mula* provide information about the physical condition of the entity in the sense that certain kinds of Grounds have special conditions of support, or can cause special effects on the Figure:

- *tsula*: the support of a Figure on the floor or a horizontal Ground is simple. The support of a Figure in a Ground that is vertical or against the force of gravity is more difficult, and not all entities are able to perform it naturally (flies can be on walls, but not human beings or big animals);¹⁷
- *pila*: the support and movements of a Figure in a liquid medium is not the same as that of a Figure in a dry environment;
- *mula*: a Figure in a closed place does not present the same visibility as a Figure in an open area.

In other words, the relationship of the Figure to the Ground (orientation), or the kind of Ground where the Figure is can have different influences in the physical condition of the Figure. This seems to be the kind of information coded by all the Spatial Configuration forms.

Finally, going back to the observation made before about the fact that the three Spatial Configuration forms linked to Ground (*tsula*, *pila*, and *mula*) all end in the same syllable, *la*: would it be the case that they all evolved from *la* ‘be standing/be in perpendicular orientation’? In the system of Trumai, *la* is a special form among the posturals, as mentioned in Section 3.1. One may wonder if the special status of *la* was the motivation to turn it into the “base” to build other forms. The problem is that so far there is not historical evidence that *tsula*, *pila*, and *mula* really evolved from *la*, beyond what is suggested by the similarity in the form. In any case, we have this formal similarity as one more reason to group *tsula*, *pila*, and *mula* together, in addition to their semantic contents.

6. Conclusion

Trumai has a set of forms that constitute a formal class — Spatial Configuration — which can be subdivided into two groups: forms linked to the posture of an

entity (*la, aha'tsi, chumuchu*), and forms linked to the Ground and special conditions of support (*tsula, pila, mula*).

The Spatial Configuration verbs can have an active or a stative meaning. With a stative meaning, they can occur in descriptive, locative, and existential clauses. The Spatial Configuration auxiliaries have only a stative meaning, and express information about body posture (the posture of the agent participant of the event). As already mentioned in Section 3.2, Trumai posture auxiliaries do not involve aspect or tense, a fact that makes this language different from other languages where posture verbs are extended to tense/aspect auxiliaries.

This fact brings us to a discussion presented by Kuteva (1999:205), who argues that the prerequisite for a posture verb to become an aspect auxiliary is to be first used as the “unmarked/canonical encodings of the spatial position of physical objects”; such use would lead to the desemanticization of the posture verbs and later to their development into aspect auxiliaries. In the case of Trumai — where posture auxiliaries do not involve aspect — posture verbs are used in locative and existential clauses, but they cannot be considered yet *the unmarked/canonical* way of expressing location or existentiality, since there are other constructions coexisting with it — the copula and zero-copula. In some cases, like in the location/existence of non-moveable entities, the Spatial Configuration verb-construction seems to be becoming the canonical way of answering a ‘where’ question; but for the other entities, the copula and zero-copula constructions are frequently used as well.

Thus, it might be that the system of Trumai is still in development, that is, it might be that the posture forms are still in the process of becoming locative/existential markers, and the posture auxiliaries have not developed aspect or tense meanings yet because the posture forms have not undergone the desemanticization necessary for the change. Perhaps in future stages of the language the posture forms will follow the path proposed by Kuteva, that is, after they become location/existential markers, the posture auxiliaries will become tense/aspect auxiliaries. This is a possible evolutionary path, on the basis of what has been attested in other languages, but at this point in time, we are only able to observe the facts reported here.

Abbreviations

ABS=absolutive; CAUS=causative; COM=comitative; COP=copula; DAT=dative; DES=desiderative; DUAL=dual; ERG=ergative; FOC=focus; FOC/TENS=particle of focus + tense; IMP=imperative; GEN=genitive; LOC=locative; MV=middle voice; NEG=negation; NZR=nominalizer; NZR.EX=nominalizer ‘ex’; PL=plural; POSS=possessive; PURP=purpose; QUEST=question; RLZR=relativizer; TEMP=temporal subordinate clause marker.

Notes

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1. S: the single obligatory argument of prototypical intransitive clauses; A: the obligatory agent-like argument of prototypical transitive clauses; O: the obligatory patient-like argument of prototypical transitive and ditransitive clauses; DAT: the recipient-like argument of prototypical ditransitive clauses.

2. Orthography and conventions: (a) for the data presented in this chapter, the orthography used by the Trumai people for educational purposes is adopted. The special symbols are: t (IPA: ʈ); ʈ (IPA: t); ' (IPA: ʔ); ch (IPA: ʃ); tl (IPA: ʈ); y (IPA: j); i (IPA: i); (b) the following convention refers to morphemes that are independent, but generally associated in a specific context: xx_xx.

3. In the first four sections of this chapter, for practical reasons *la* is glossed as 'be.stand-ing', but as we will see in Section 5.1.1, the semantics of this form is a little more complex.

4. In Section 3.2, we will see why the combination [*V_{main} Spatial Configuration*] is analyzed as a [*V Aux*] sequence, rather than a serial verb construction.

5. For instance:

- (i) a. Ha ka'chĩ de.
1 walk already
'I am already walking.'
- b. Ha wa-ka'chĩ de.
1 mv-walk already
'I am already walking/going away.'

6. The prefix *te-* (or *tsi-*, for words beginning in a vowel) indicates which body part will be involved in the action being performed:

- (i) Te-pits'a ka_in ha laketsi.
by.means-foot FOC/TENS 1 go.for.visit
'I am going for a visit by foot.'

Te- occurs only in the cases described here; it is not an instrumental prefix/preposition (the instrumental postposition is *letsĩ*).

7. In Trumai, the verb in a temporal subordinate clause can be modified by aspect auxiliaries.

8. Similarly to the Spatial Configuration-verb construction, the copular construction can sometimes have an existential reading:

- (i) Pike-n ka_in yaw chĩ.
house-LOC FOC/TENS person cop
'There is a person in the house.'
[this clause could also be interpreted as: **The** person is in the house]

9. The use of *la* is possible only for animals whose body is flexible so that they present variations of posture. *La* cannot be used for an animal with a rigid body (e.g. a turtle), for reptiles, or for insects (butterflies are the only exception, since their wings stand vertically when they are closed).
10. *Iudan* 'behind' and *apudan* 'under' can be analyzed into parts: *iud(a)* + loc; *apud(a)* + loc. However, Trumai consultants do not know the meaning of *iud(a)* and *apud(a)* by themselves (they are not terms for body parts). The consultants only know the meaning of the whole combination.
11. Although a good candidate, *tonela* does not seem to be a member of the Spatial Configuration class, because it cannot be used as an auxiliary. The semantics of *tonela* are a little hard to define. For some situations, the best gloss for this form would be 'hang', since the body of the Figure is free; for other situations, the Figure is not exactly hanging, but rather projected from a place. This form still needs more investigation.
12. In Trumai, NPs with nouns that refer to inanimate entities do not take plural markers. Thus, the absence of a pluralizer in an NP that contains an inanimate noun does not necessarily mean 'singular'.
13. Actually, for describing spirits in the air, no Spatial Configuration form was accepted by the consultants. They use the copula for this situation.
14. Note that, objectively speaking, the whole body of the spider is not in contact with the roof, only its legs. However, in Trumai spiders and other insects can only 'lie'.
15. If a human being is sitting in a hammock, *aha'tsi* is used; if s/he is standing, *la* is used.
16. One could wonder if *pila* is also used to refer to fish that live in the river. Interestingly, when Trumai speakers want to say that fish are in the river in the sense that they live there, *pila* is not used; rather, the verb *ka'chi* 'walk' is employed:
 - (1) Misux apudan ka_in k'ate ka'chi.
 river under FOC/TENS fish walk
 'The fish is in the river.' (Lit. The fish walks in the river.)
17. Observe that *la* also describes Figures in these kinds of Grounds; however, in the examples of my corpus where *la* is used, the Figure is not just in contact with the vertical or upside-down Ground. It is inserted or attached to it, fixed and stable. Thus, it seems that in the case of the Figure described by *la*, gravity has no special effects on it.

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CHAPTER 8

Men stand, women sit

On the grammaticalization of posture verbs in Papuan languages, its bodily basis and cultural correlates*

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1. Introduction

This chapter concerns verbs of sitting, standing, and lying in Papuan languages of New Guinea. The languages I will be looking most closely at are ones which belong to the large subset of Papuan languages that have what has been called “classificatory verbs” (Lang 1975), used in existential clauses. Rather than a single verb ‘to be’, these languages have sets of alternative verbs used in predications of being (‘There is a ___’, ‘___ exists’, etc.), where each of them takes only a certain range of nouns as its subject. In Kamoro, for example, there are five such verbs, three of which are *ame*, used for, among things, people, houses, and trees; *epe*, for pots, dishes, plants, and mountains; and *kai*, for land, rivers, lakes, and wood (Lang 1975:116–17). These systems are of great interest for the topic of this volume because the verbs used in them are also used in other contexts where they have lexically more specific meanings, and these very often include ‘sit’, ‘stand’ and ‘lie’. These are, for example, the lexically-specific meanings of *ame*, *epe* and *kai* respectively in Kamoro.

As in many other languages of the world (Newman, this volume), verbs from the set ‘sit’, ‘lie’, ‘stand’ in Papuan languages also serve aspectual functions in certain contexts: ‘see’ + ‘stand’=‘look for a long time’; ‘do’ + ‘lie’=do regularly or habitually, etc.

Given the polysemy involved among all three of these functions (the lexically specific, the existential-classificatory and the aspectual), the main question I will be exploring in this chapter is: how are we to understand the relationships among these functions as served by what appear to be the same verbs for each? The

languages for which I will explore this question in most detail are two languages from highland Papua New Guinea: Enga, based on published sources (Lang 1973, 1975); and Ku Waru, on which my wife Francesca Merlan and I have done extensive fieldwork over past twenty years.

2. Enga classificatory verbs

Enga is spoken by over 150,000 people (the largest speakership of any Papuan language) at the western end of the densely settled central highlands region of Papua New Guinea. Its classificatory verb system has been extensively studied by Andrianne Lang, who has published what is still the most detailed account we have on any such system in the Papuanist literature (Lang 1975). The inventory of verbs used in existential constructions is shown below, each with examples of the kinds of subject NPs it was said by Lang’s Enga assistants typically to occur with (a matter on which Lang finds their judgements to be in close accord with her own analysis).

Table 1. Enga Existential Verbs (adapted from Lang 1975:41, 47, 63)

<i>kata-</i>	occurs with subject NPs whose typical referents are judged to be tall, large, strong, powerful, standing or supporting, e.g. ‘men’, ‘house’, ‘tree’, ‘sun’, and ‘leg’ (lexical meaning ‘to stand’).
<i>pita-</i>	occurs with subject NPs whose typical referents are judged to be small, squat, horizontal, or weak, e.g. ‘woman’, ‘possum’, ‘insects’, and ‘pond’ (lexical meaning ‘to sit’).
<i>sa-</i>	occurs with subject NPs whose typical referents are orifices, locations, or crawling or aquatic beings; e.g. ‘eel’, ‘door’, ‘ground’, ‘shovel’, and ‘mouth’ (lexical meaning ‘to lie’).
<i>pala-</i>	occurs with subject NPs whose typical referents are internal or subterranean, e.g. ‘worm’, ‘heart’, ‘liver’, and ‘sweet potato’ (lexical meaning ‘to lie inside’).
<i>lya-</i>	occurs with subject NPs whose typical referents are hanging or protruding objects, e.g., ‘wasp’, ‘bee’, ‘moss’, ‘mushroom’, ‘fruit’, ‘seed’, ‘flower’ (lexical meaning ‘to hang’).
<i>ipa-</i>	occurs with subject NPs whose typical referents are judged to be intermittent, capable of growth, liquid or gas; e.g., ‘river’, ‘rain’, ‘hair’, ‘blood’, and vine used for rope (lexical meaning ‘to come’).
<i>manda-</i>	occurs with subject NPs whose typical referents are reproductive, e.g., ‘penis’, ‘vagina’, and ‘testicles’ (lexical meaning ‘to carry’).

The following sentences illustrate the use of each of these existential verbs (hereafter EV), with the verb marked for habitual aspect:¹

- (1) *íta dúpa kate-ngé*
tree the be-HAB
'Trees exist.' (Lang 1975:56)
- (2) *saá dúpa kákasa pete-ngé*
possum the bush-LOC be-HAB
'Possums are in the bush.' (Lang 1975:44)
- (3) *kanopato dupa si-ngi*
snake the be-HAB
'Snakes exist.' (Lang 1975:60)
- (4) *mapú dúpa pale-ngé*
sweet potato the be-HAB
'Sweet potatoes exist.' (Lang 1975:60)
- (5) *lítu dúpa lyi-ngí*
mushroom the be-HAB
'Mushrooms exist.' (Lang 1975:44)
- (6) *endákí dúpa epe-ngé*
river the be-HAB
'Rivers exist.' (Lang 1975:44)
- (7) *pongó dúpa mande-ngé*
penis the be-HAB
'Penes exist.' (Lang 1975:44)

Some Enga nouns may be alternatively paired with more than one verb, with corresponding differences of meaning. Compare (1), for example, with (8) and (9):

- (8) *íta (pokápae) sí-nge*
tree cut-STA be-HAB
'Felled wood/trees exist(s).' (Lang 1975:56)
- (9) *íta (tamópae) pale-ngé*
tree rotten-STA be-HAB
'Rotten wood exists.' Lang 1975:57)

The parenthesized stative modifiers are optional in these sentences, but when they are present, the sentences are grammatical only with the *sa-* (~*sí-*) and *pala-* (~*pale-*) verbs respectively, not with *kata-* as in (1). In such cases it could be argued that we are really dealing with distinct nominal lexical items, or at least with a case of systematic polysemy, where the difference between the meanings 'tree' and 'wood' (or 'tree substance') is expressed by the co-occurrence restrictions on associated existential verbs (cf. Lang 1975:65, f.n. 17).

As opposed to these differences at the level of “sense” or dictionary-meaning, imputed differences among kinds of possible referents do not affect the assignment of nouns to one EV co-occurrence class or another. For example, compare (1) with (10) and (2) with (11):

- (10) *ítá muú dúpa kate-ngé*
 tree short the be-HAB
 ‘Short trees exist.’ (Lang 1975:58)
- (11) *saá andáke dúpa pete-ngé*
 possum large the be-HAB
 ‘Large possums exist.’ (Lang 1975:58)

The fact that the EV *kata*-(~*kate*) is canonically associated with large or tall objects and *pita*-(~*pete*) short or small ones does not override the assignment of *ítá* ‘tree’ and *saá* ‘possum’ to those respective EV classes even when those nouns are modified with adjectives which explicitly specify the reverse attributes.

Notwithstanding the possibility of alternative classing such as shown in (1), (8) and (9), the Enga EV system does seem to partition the nominal lexicon fairly exhaustively and disjunctively. Lang (1975:41) says that “The EV (with a few exceptions) occurs with a noun in a one-to-one relation; that is, every noun co-occurs with a specific EV, and each of the EVs co-occurs only with a certain set of nouns”. Her published lists of nouns for each EV class (Lang 1975: 149–55) show very few in more than one class — 11 out of 220 or 5 per cent. For her total corpus of some 3000 nominal expressions she claims an even lower portion of less than one per cent (Lang 1975:53).

Given that the verbs used in existential clauses are also associated with lexically specific meanings such as ‘stand’, ‘sit’ and ‘lie’, on what grounds can a principled distinction be made between the existential uses and the lexically more specific ones? To answer this question we must first note that some sentences are indeed ambiguous between those two readings. Examples given by Lang are shown in (12) and (13):

- (12) *Koné akáli dóko andá-ka ká-ly-a-pe*
 red man the house-LOC be-PRS-3SG-Q
 ‘Is the European man at home?’ or ‘Is the European man standing in the house?’ (Lang 1975:42)
- (13) *Koné énda dóko andá-ka pí-ly-a-pe*
 red woman the house-LOC be-PRS-3SG-Q
 ‘Is the European woman at home?’ or ‘Is the European woman sitting in the house?’ (Lang 1975:43)

But the related sentences (14) and (15) do not permit of the same ambiguity:

- (14) Koné akáli dóko andá-ka pí-ly-a-pe
 red man the house-LOC sit-PRS-3SG-Q
 ‘Is the European man sitting in the house?’ but not ‘Is the European man at home?’ (Lang 1975:43)
- (15) Koné énda dóko andá-ka ká-ly-a-pe
 red woman the house-LOC stand-PRS-3SG-Q
 ‘Is the European woman standing in the house?’ but not ‘Is the European woman at home?’ (Lang 1975:43)

Lang (1975:43) comments that “in [14] the speaker has strong reasons for presupposing that the man is in fact sitting (not standing, sleeping, or [lying], etc.); however in [12] the speaker does not want to know whether the man is sitting, sleeping, etc. — and so he must use the [existential verb] which normally co-occurs with *akáli*, ‘man’”. Similar considerations apply to ‘woman’ and ‘stand’ in (15) vs (13). In other words, when they are used in their existential senses, the choice among these seven verbs says nothing about the imputed state of the referent whose existence is being predicated, but is instead conditioned by, and indicative of, stereotypic features of *classes* of referents associated with particular lexical items which occur with each of them as its grammatical subject. And, conversely, the difference between predications of existence and predications of stance-type is signaled in part by the speaker’s conformity or non-conformity to the co-occurrence restrictions in terms of which these stereotypes are grammaticalized.

Another formal criterion for the distinction between existential constructions and lexically-specific predications of stance in Enga is that only the former can occur in infinitivized form as a complement in desiderative and purposive constructions. An example within a desiderative construction is shown in (16):

- (16) wáné dóko akáli ká-ly-a-nya más-í-á
 boy the man be-INF-GEN think-RP-3SG
 ‘The boy wanted to be a man.’ (Lang 1975:43)

Lang says that this sentence is not grammatical if any of the six other existential verb roots besides *ká* (~*kata*) is used within the infinitive complement (i.e. **pí-ly-a-nya*, **pá-ly-a-nya*, etc.). A purposive example is (17):

- (17) baa-mé énda pí-ly-a-nya lá-o máso-o ngánga mande-ly-á-mo
 she-AG woman be-INF-GEN utter-O think-O baby bear-PRS-3SG-DEC
 ‘In order to be a woman, she is having a baby.’ (Lang 1975:43)

As in (16), only one of the seven EVs may be used in the infinitive complement, and the choice among them is determined by the collocation class of its subject NP. The subject in this case is *énda*, ‘woman’, so the verb in the complement must

be *pí-* (*~pita-*), the one which in its lexically more specific uses means ‘sit’ (not, for example *ká-lya-nya* as in 15).

In addition to their being formally distinguishable from lexically-specific predications of stance on the grounds I have discussed above, the Enga existential constructions are also formally distinct from what we can call copular² constructions, which are used to attribute properties to specific referents, or to predicate logical relations such as class inclusion or type-token relations. As in many languages (see Benveniste 1971), the latter functions are realized by a distinct clause type which does not include a verb. Examples are (18)–(20):

- (18) *dáke mená*
 that pig
 ‘That is a pig.’ (Lang 1975:45)
- (19) *ánga baá itá méndé*
 pandanus it tree a
 ‘The pandanus is a tree.’ (Lang 1975:45)
- (20) *pongéná dúpa néne*
 fly the insect
 ‘Flies are insects.’ (Lang 1975:45)

As opposed to these copular clauses, the kind of construction illustrated by (1)–(7) is used to predicate not qualities or logical relationships, but the actual existence of entities of the kind referred to by its subject NP. Such sentences can be expanded to include a locative expression specifying *where* something exists (as in 2), or with an NP referring to a possessor (Lang 1975:44–5), yielding an expression which literally glosses as ‘The x exists to/for y’, which, as in many languages, is the way that one expresses the idea conveyed in others by verbs meaning ‘have’ (cf. Benveniste 1971). But in all these uses, the common denominator is that the verb predicates existence of an entity or entities of the kind referred to by its subject NP. As is true of existential constructions generally (Lyons 1968:390, cited in Lang 1975:46), the reference of the subject NP tends to be indefinite rather than definite (since definite reference usually *presupposes* existence of the referent, thereby obviating any need for it to be explicitly predicated). Because this is the case, there is wide latitude for the existential verbs to vary in ways that characterize, not the presumed state of a given referent, but, as I have said above, the state or mode of existence that is associated with referents of the kind *typically* referred to with the lexical item in question.

How do they do this? Presumably through processes of “extension” of the kind discussed by John Newman in his introduction to this volume. In order to understand how these work in this case, one needs to consider two different issues. The first is one that Newman discusses in some detail with respect to

posture verbs, namely, what aspects of what he sees as the lexically specific meanings of these verbs (and in the Enga case, some other verbs as well) are taken up within a given classificatory system as the relevant ones for extension to other domains beyond the source domain? Since in this case those other domains are classified in terms of stereotypic features of given classes of referents rather than denotative features of lexical nouns, a second issue that is relevant here is, what are the relevant stereotypes?

There is not room here to consider the full list of lexical items that Lang gives for each of the seven EV classes. Instead I will summarize some the main patterns that are evident from them and from Lang's analysis of her total corpus of approximately 3000 Enga nouns and noun phrases (Lang 1975: 149). Needless to say, no such classification can be entirely consistent or systematic. But this one does show a high degree of systematicity, especially when one looks at the internal partitioning of particular lexical domains such as body parts, plants or animal species. Given the focus of this volume, the classes I will be concerned with are the ones based on verbs whose lexically specific meanings are 'stand', 'sit', 'lie' and 'lie inside'. With the exception of the class based on 'come' (which is the third largest), these four classes are in fact the largest of the seven (in terms of the proportion of the attested inventory of nominal expressions belonging to each), ranking second, fourth, first, and fifth respectively (Lang 1975: 149–55).

Within the domain of nouns referring to animate beings, nearly all of them belong to four of the seven classes, namely the 'stand', 'sit', 'lie' and 'lie inside' classes. It will be noted that the semantic features listed under these and the other classes in Table 1 are quite disparate and not all mutually exclusive from class to class. For example 'suspended', listed under the *kata*- class is not mutually exclusive with 'subterranean' listed under the *pala*- class, or 'capable of growth' (under *ipa*-) with 'small' (under *pita*-). But when we look within a particular domain such as that of animate beings, the range of relevant dimensions of contrast becomes more limited and the values within each become more systematically opposed to each other.

For the classification of animate beings, it appears from Lang's analysis that the main dimensions that are relevant are habitat and a second dimension that she glosses as 'size (or potential harmfulness)', but which also seems to involve shape and posture. Habitat is the primary dimension of contrast in that it alone provides the basis for a mutually exclusive division that maps neatly onto three of the EV classes: subterranean as *pala*- ('lie inside') class, heavenly as *kata*- ('stand') class and aquatic as *sa*- ('lie') class. Examples are: subterranean (*pala*-), *ímú* 'worm', 'grub', 'earthworm', *pombáta*, 'termite' (Lang 1975: 150), *néne anda*, 'maggot'; heavenly (*kata*-), *nikí* 'sun', *kaná* 'moon', *búi* 'stars' (all regarded as animate) (Lang 1975: 151, 67), *yályakali* 'sky people'; aquatic (*sa*-), *ómonangai* 'eel', *wáma* 'eel', *amané* 'fish', *písa* 'fish'.³

Among bird species there is a related but partially cross-cutting division into: arboreal (flighted), which are *pita*- ('sit') class; and aquatic, which are *sa*- ('lie') class; while the large, terrestrial, flightless cassowaries are *kata*- ('stand') class (Lang 1975:76). The generic term *yáka* 'bird', 'fowl' is of the *pita*- 'sit' class (Lang 1975:150), which suggests two things: 1) that arboreal, flighted birds are the least marked or most highly prototypical sort, relative to which aquatic and large terrestrial ones are treated as more of a special case; and 2) that in the case of the cassowary it is the upright posture and formidable size and strength of this species rather than its terrestrial habitat that are most relevant for its assignment to the *kata*- ('stand') class (since fowls too are terrestrial but are assigned to the *pita*- class).

Indeed, as the reader may have noticed, in contrast to Lang's threefold division of habitat classes into 'heavenly', 'subterranean' and 'aquatic', 'terrestrial' is not one that she claims can be mapped onto a single EV class — a notable absence given the large number of terrestrial species there are among those identified in her Enga lexicon. Here is where the other dimension of size-strength-posture comes to the fore. Most terrestrial beings are assigned to the *kata*- ('stand') class or to the *pita*- ('sit') class — the stereotypically large, upright, strong ones to the former and the stereotypically smaller, squat, weak ones to the latter. Examples are: *kata*-, men, boys, pigs, dogs, non-human males, cow (Lang 1975:153); *pita*- women, girls, game animals, cat, frogs, rodents, insects, snail, non-human females (Lang 1975:150–1). The categorical treatment here of men/boys as large/upright/strong and women/girls as small, squat, weak is a good example of what I mean by "stereotypes", since obviously there are in reality some Enga women who are taller and stronger than some Enga men. But as with (14) and (15) above, this does not mitigate against the ungrammaticality of using the Enga noun *énda* 'woman' in an existential construction with the verb *kata*-, or *akáli* 'man' with *pita*-.

These stereotypes are deeply ingrained, and consonant with many other facts about the culture and social lives of the Enga and neighboring New Guinea Highland peoples. For example, women's menstrual blood is throughout this region considered to be a deadly poison, and their vaginal effluvia a danger to men even when they are not menstruating. Consistent with these beliefs, it is a grave offense for a woman to step over a man. There are many indoor occasions when this might otherwise seem to be the obvious way to move around, since traditional style thatched houses in this region are too low-roofed for adults to stand up in (partly to make them easier to heat with a small fire on cold highland nights), and houses are often crowded with recumbent men and boys. Indeed men often step over each other when moving around. But not women.

A related norm is for women when interacting with men, especially ones who are not their close consociates, to hunch their backs slightly and turn their toes

inward, presenting themselves as a relatively compact and roundish mass in relation to the male's canonically more upright posture. In other words, the stereotypes squat/small vs upright/elongated are not just descriptive categories in terms of which people represent (and partially misrepresent) reality to themselves, they are also highly charged evaluative categories in terms of which people partially shape reality — in this case their bodily deportment — in order to bring it into conformity with them. Of course they have less power to make this happen among other animal species (but see note 4 below), but the stereotypes which are applied and developed in the first instance with regard to humans, nonetheless become the main basis for categorizing the rest of the animal world, at least insofar as gender is attributed to the other species.⁴

For the EV classification of the animal species themselves (as opposed to the genders within them), we have seen above that habitat is focused on as the main dimension of contrast, especially for the non-terrestrial species. Though Lang goes into less detail concerning the EV classification of plant species, from what she does say it seems to work in some ways like the three-habitat classification of animate beings in general, and in other ways like the size/posture-based classification of terrestrial ones in particular. Parallel to the distinction between subterranean beings and others, there is a distinction between plants that grow their functionally important parts underground (important to the Enga, that is) and others that grow them above ground. Like the underground beings discussed above (worm, grub, termite, and maggot), the underground plants take *pala-* 'lie within'. Examples are *amú* 'yam', *mapú* 'sweet potato', *katása* 'carrots' and *pasetélé* 'potato'.⁵ Other plants are classified mainly on the basis of their size, shape, and posture according to the criteria shown in Table 1. Long, upright plants for example are mainly of the *kata-* ('stand') class, e.g. *ítá* 'trees', *lyáá* 'sugar cane', *sambá* 'cane grass', *kanápá* 'corn'/'maize', *saé* 'banana', and *ángá* 'pandanus'. Especially 'squat', roundish ones are, like women, of the *pita-* ('sit') class, e.g. *kapúsa* 'cabbage' *letésa* 'lettuce'. Many others take *sa-* ('lie') which is the largest of the classes and seems to be a kind of default class in this domain as in others (Lang 1975:51).

Before I introduce the Ku Waru data and go on to compare it with the Enga in Section 3 below, there is another fact about Enga grammar that I will introduce here for its relevance to questions I will take up there about the comparative semantics and grammaticalization of posture verbs. It concerns one of the seven verbs that figure in the existential constructions I have been discussing above, namely *kata-*, which in its lexically more specific sense means 'to stand'. Besides its use in existential constructions this verb has another use in a grammatical construction where its lexical value becomes, likewise, less specific. This is in sentences such as the following, where it serves as an aspectual modifier:

- (21) akáli dokó-mé yána dóko pyá-ma pyá-ma pyó-o kat-é-á
 man DET-AG pig DET hit-PRG hit-PRG do-O stand-PAST-3SG
 The man hit the dog again and again.

Referring to the construction exemplified here as a progressive aspect construction Lang (Lang 1973:xlvi) says:

In this construction the suffix *-ma* indicates that the action is continued with a certain amount of perspicacity [sic]. The suffix is added to the verb stem which in this form is repeated followed by *pyóo* ['do' + complementizing suffix] followed by a conjugated version of the verb indicating the action to be repeated or a conjugated form of the verb *kata-* 'stand'.

3. Ku Waru

Ku Waru is spoken within the Western Highlands Province of Papua New Guinea, in an area about fifty kilometres to the southeast of Enga Country, in the Nebilyer Valley, south-west of Mt. Hagen town. It belongs to a large dialect continuum which extends throughout the valley, and also includes Melpa to the east, Imbonggu to the south, and Kaugel to the west. This continuum belongs to what Foley (1986) calls the Chimbu family, which is only distantly related to the family to which Enga belongs.

In Ku Waru, there are five verbs which figure in existential clauses of the kind we have seen in Enga above. Four of them may be said to have a central meaning which involves semantic dimensions of posture and position, of the entity whose existence is predicated. These are: *pe-* 'lie, sleep', *mol-* 'live', 'be' (animate), *angaly-* 'stand, protrude', and *le-* 'lie, be prostrate, be' (generally of an inanimate entity, but if of an animate, with the implication of prostration or impairment). There is a fifth verb *o-*, which usually means 'come', but also figures in a small number of existential clauses, where it has a rather similar function to Enga *ipa-* (see Table 1).⁶

Examples of the use of these verbs in their existential function are:

- (22) *mol-*
 a. ab tal molybeli
 woman two *mol.HAB.3DU*
 'There are two women.'
 b. no bia naa molym
 liquid beer not *mol.HAB.3SG*
 'There's no beer.'
 c. uj kalyipa moluba
 tree casuarina *mol.FUT.3SG*
 'There will be a casuarina tree.'

- (23) *angaly-*
- a. lku angalyirim
house *angaly*.RP.3SG
'There was a house.'
 - b. kub-ki angure angalyilym
leg-arm four *angaly*.HAB.3SG
'There are four limbs.'
 - c. mong angalyilym
eye *angaly*.HAB.3SG
'There are eyes.'
- (24) *pe-*
- a. ung mari pelym
words some *pe*.HAB.3SG
'Some words remain.' ('... to be said' i.e., 'We haven't heard the last of this')
 - b. po no ti-na pim
sugar liquid tea-LOC *pe*.PRF.3SG
'There's sugar in the tea.'
 - c. pudumong peba
trouble *pe*.FUT.3SG
'There'll be trouble.'
- (25) *le-*
- a. ku moni ya naa lelym
stone money here not *le*.HAB.3SG
'There's no money here.'
 - b. on-ti lirim
corpse-IDF *le*.RP.3SG
'There was a corpse.'
 - c. ya luip-kalipa kep-ma lirim lekim
here (river names) embankment-COL *le*.RP.3SG *le*.PPR.3SG
'These Luip and Kalipa River banks have long been here and still remain.'
- (26) *o-*
- a. kidipidi olym
beard/whiskers *o*.HAB.3SG
'There's a beard/whiskers.'
 - b. kubi naa olym
nose not *o*.HAB.3SG
'There's no nose.'

- c. kidipaim olym
 fingernail(s)/toenails *o.HAB.3SG*
 ‘There is/are(a)fingernail(s)/toenails(s).’

As in Enga, these existential clauses are distinct from copular ones, which are verbless. Examples of the latter are *lku na-nga* ‘The house is mine’ (literally ‘House mine’) and *ilyi Kalyke* ‘This is Kailge’ (literally ‘This Kailge’), where in each case the predicating element, like the verb in clauses which have one, comes last. Compare: *na-nga lku* ‘my house’; *Kalyke ilyi* ‘Kailge is this one’.

As in Enga, each of these five verbs exemplified in (22)–(26) can also be used in a corresponding possessive clause, which has an additional NP in initial position referring to the possessor. The other NP, referring to the possessed item, still controls verb agreement, as in the corresponding existential clause.⁷ In other words, instead of predicating possession by placing the ‘possessor’ NP in transitive subject position, as in languages which have a verb such as *have*, in Ku Waru as in Enga it is done by making the ‘possessed’ NP the subject of an intransitive verb of ‘being’.⁸ Nearly any existential clause of the type illustrated above can be expanded into a corresponding possessive in this way. Thus, corresponding to the existential clauses above, we can have:

(27) *mol-*

- a. na ab tal molybeli
 I woman two *mol.HAB.3DU*
 ‘I have two wives.’
 b. na no bia naa molym
 I liquid beer not *mol.HAB.3SG*
 ‘I have no beer.’
 c. nu uj kalyipa moluba
 you tree casuarina *mol.FUT.3SG*
 ‘You will have a casuarina tree.’

(28) *angaly-*

- a. abayl lku angalyirim
 woman-DEF house *angaly.RP.3SG*
 ‘The woman had a house.’
 b. yabu-ma kub-ki angure angalyilym
 people-COL leg-arm four *angaly.HAB.3SG*
 ‘People have four limbs.’
 c. na mong angalyilym
 I eye *angaly.HAB.3SG*
 ‘I have eyes.’

- (29) *pe-*
- a. olto ung mari pelym
we two words some *pe.HAB.3SG*
'We two still have some words (to say).'
 - b. na po pim
I sugar *pe.PRF.3SG*
'I have sugar.'
 - c. eni pudumong peba
you(PL) trouble *pe.FUT.3SG*
'You(PL) will have trouble.'
- (30) *le-*
- a. olyo ku moni naa lelym
we stone money not *le.HAB.3SG*
'We have no money.'
 - b. kola yabu on-ti lirim
mourn people corpse-IDF *le.RP.3SG*
'The mourners had a corpse.'
- (31) *-o*
- a. yi ada-ma kidipidi olym
man old-COL beard/whiskers *o.HAB.3SG*
'Old men have beards.'
 - b. ab ilyi kubi naa olym
women this nose not *o.HAB.3SG*
'This woman has no nose.'
 - c. yab payl kidipaim olym
people all fingernail(s)/toenails *o.HAB.3SG*
'Everyone has fingernail(s)/toenails(s).'

As far as I can tell from the literature, this pattern whereby existential clauses are expandable into possessive ones is ubiquitous among the Papuan languages, and is always possible with *any* of the existential verbs used in a given language.¹⁰ In this respect the languages behave differently from languages such as Atakapa, which uses only its 'sit' verb in this way (Watkins 1976:27–8, cited by Newman, this volume, p. 19).

Returning now to the main issue to be treated here, what exactly is signalled by the choice of one or the other of these four verbs in clauses such as (22)–(31)? To what extent is the choice sensitive to, and hence indicative of, semantic features of the nouns themselves? Certainly there are, for each of the verbs, certain sorts of nouns with which they tend to co-occur. Some of these are as follows: *mol-* with nouns referring to liquids, certain other inanimate objects (e.g., shoes

when being worn) and almost all living things (including plants); *pe-* with internal body parts (e.g., *olu* 'stomach', *kameli* 'kidneys', *geli* 'womb' and abstract nouns referring to sources of trouble (*boni* 'grievance', *kapo el* 'property dispute', *pudumong* 'trouble', etc.); *le-* almost always with inanimate nouns, prototypically nouns referring to wealth objects; *angaly-*, used mainly for certain body parts, most but not all of them appendages, e.g. *ki* 'hand'/'arm', *kib* 'foot'/'leg', *kum* 'ear', *nuimka* 'neck', *mai obil* 'forehead', and certain kinds of human artifacts, e.g., *lku* 'house'. But many nouns, certainly more than the five percent in Lang's published Enga lists, can occur in alternative pairings with more than one of these verbs. For example, nouns referring to human beings can occur with any of the four verbs *mol-*, *pe-*, *le-* *angayl-* with considerable differences among the kinds of "existence" or "state" predicated by each. See for example, sentences (22a), (25b), (27a), and (30b). And compare, for example:

- (32) *yi ada-yl lku suku molym*
 man old-DEF house inside *mol.HAB.3SG*
 'The man is (staying) inside the house.'
- (33) *yi ada-yl lku suku pelym*
 man old-DEF house inside *pe.HAB.3SG*
 'The man is lying/sleeping inside the house.'
- (34) *yi ada-yl lku suku lelym*
 man old-DEF house inside *le.HAB.3SG*
 'The man is lying prostrate/dead inside the house.'
- (35) *yi ada-yl lku suku angalyilym*
 man old-DEF house inside *angaly.HAB.3SG*
 'The man is standing inside the house.'

As is clear from the earlier examples, *pe-*, *le*, and *angaly-* do not always mean 'sleep', 'lie dead', and 'stand' respectively. These are contextually specific meanings in clauses with a particular sort of subject. But the four verbs do differ consistently in the kinds of states of being which they predicate. To show how they do, I will try to provide some informal generalizations about the shades of meaning associated with each, and then suggest a formal analysis by which they can be provisionally specified as predicate types.

Angaly- typically predicates states of standing and/or protruding, projecting outward from a surface or ground — thus visibly manifest rather than latent or concealed (e.g., of the body, arms, legs, eyes, neck, forehead, but not internal organs). In contrast, *mol-* signals being or existence in a place (also generally visible, not concealed). *Mol-* contrasts with *pe-* in being indeterminate as to the position of an animate being of which existence is predicated, while *pe-* centrally

means ‘to lie, sleep’ (in the latter sense, generally with the preverb *uru*), and thus (often in the Habitual) is used to mean ‘live, dwell’ via an extension from ‘habitually sleeps at’:

- (36) *ya ilyi-nga pelym naa nyai*
 here this-GEN *pe.3SG.HAB* not say.IMP.PL
 ‘Do not say she lives around here.’
- (37) *kolya te-nga lupa pelym nyai*
 place indef-GEN other *pe.HAB.3SG* say.IMP.PL
 ‘Say she lives somewhere else.’

The Habitual forms of all five existential verbs have double values. while they may, as in the above example, express habitual being (in a place), they may also be used to express present continuous meaning. Thus one may say:

- (38) *nu-nga amnya lku-na moly-m-i*
 you-GEN mother house-LOC *mol.HAB.3SG-Q*
 ‘Is your mother at home?’

A usual answer would be:

- (39) *moly-m-ayl*
mol.HAB.3SG-DEF
 ‘She is indeed.’

With the verbal adjunct *uru*, one may find:

- (40) *nabi tekim*
 what do.PPR.3SG
 ‘What is he doing?’

answered by:

- (41) *uru pelym*
 sleep *pe.HAB.3SG*
 ‘He’s sleeping.’

The present progressive tense might also be found in either preceding example.

Mol- contrasts with *le-* in that the latter generally expresses existence or being-in-a-place of an inanimate object, and of an animate when the sense is that of an animate being prostrate, lying on the ground, laid out, sick or otherwise physically impaired. Thus, one may say of a person:

- (42) *we lelym*
 nothing *le.HAB.3SG*
 ‘He/she is just lying there.’

The sense of such an utterance would be: the person is sick, failing to recover (*we*) from an impairment. An alternative answer would be:

- (43) we molym
 nothing *mol*.HAB.3SG
 ‘He/she is there.’

This would ordinarily be taken to mean that the person is continuing on in good health, as before, in the usual or normal condition, or sometimes (varying with the specific interpretation of *we* in context) is carrying on doing little or nothing, idle or unoccupied. In any case, there is no nuance of illness, prostration or physical impairment.

When used of inanimate objects, *pe-* contrasts with *mol-*, *angaly-* and *o-* in usually entailing the notion that the object is in a subterranean or otherwise concealed position, e.g., sweet potatoes in the garden, sugar in tea (as in 24b) above, or money in one’s pocket. Compare, for example, (23b) with (22d), (23a–c), and (26a–c); and (44a) with (44b):

- (44) a. uj karaip-ti molym
 tree nothofagus-DEF *mol*.HAB.3SG
 ‘There’s a nothofagus tree.’
 b. karaip puruyl-ti pelym
 nothofagus rot.PPR-DEF *pe*.HAB.3SG
 ‘There’s a rotting nothofagus.’

Just as in Lang’s similar examples from Enga (1 vs. 9 above), (44a) would normally be used to refer to a standing tree (and is grammatical without the specifier *karaip*, meaning simply ‘There’s a tree’). Example (44b) comes from a speech by a ‘big-man’ in which it was understood to refer to a rotting tree trunk which was lying half sunk into the ground along a path through dense forest (for the full context see Merlan and Rumsey 1991: 148 ff.). Likewise, with abstract nouns such as in (24a), (24c), (29a) and (29c) above, the notion is that the trouble, grievance, etc., has not fully manifested itself, but will do so later on. Indeed (44b) indirectly conveys this sense as well, being a figure of speech which refers metaphorically to an old grievance, or score which has yet to be settled (see Merlan and Rumsey 1991: 103). *Le-* is like *pe-* in this respect, insofar as it usually refers to objects which are not in a prominent or highly visible position. When used of money, for example, it simply indicates that the money exists or is possessed by someone. But when the money is tacked to a display board for presentation at a ceremonial exchange event, the verb used of it in existential clauses is *mol-*. For example, a sentence otherwise identical to (25a), but with the verb root *mol-* instead of *le-*, could be used when pointing to a display board to mean ‘There’s no money (or not enough by the relevant standard) here on the board’; or with *pe-* when

indicating one's pocket or string bag to mean 'There's no money here (in the pocket/bag)'.

But in another respect, the meaning of *le-* has something in common with that of *angaly-* which distinguishes both of them from *mol-* and *pe-*. In order to see what this is, it is important to note that the latter two verbs, *angaly-* and *le-*, occur not only in intransitive clauses, but also in certain transitive ones, where they usually can be glossed 'put' or 'put in place'. Examples are:

- (45) abayl pul-na angalyikir
 woman-DEF trunk-LOC *angaly*.PPR.1SG
 'I'm standing the woman up on a tree stump.'

- (46) abayl kuku lirim
 woman-DEF red face paint *le*.RP.3SG
 'The woman put red face paint (on herself).'

- (47) yi-yl le lim
 man-DEF anal discharge *le*.PRF.3SG
 'The man shat.'
 (cf. le tum
 anal discharge strike/blow.PRF.3SG
 'He farted.')

As in these transitive clauses, the use of *angaly-* and *le-* in intransitive ones such as cited above usually carries with it a notion that the object (in this case the grammatical subject) not only exists, but exists in a specific place or position. Usually the object has been deliberately put there by a conscious agent. For *le-*, we can say that, minimally, the placement is *not* one which is under the conscious control of the object itself — hence the contrast between (32) and (34) above, where *mol-* entails such control and *le-* (for corpse) entails its absence. As for *angaly-*, it should be obvious that (23a), with 'house' as subject, involves a deliberate "putting in place". Less obviously, Ku Waru people also regard the visible parts of the human body (arms, legs, hair, fingernails, etc.) not as inevitable developments *in utero*, but as something that has to be formed through repeated acts of intercourse early in the pregnancy and then through massaging the mother's abdomen (see Merlan and Rumsey 1986:lines 426–8, 580–90, 769).

To sum up what I have said so far about the semantics of the five Ku Waru existential verbs, though I do not claim to have arrived at an exhaustive analysis, there do seem to be two cross-cutting axes of contrast that figure centrally in the meanings of four of them. One involves a difference between things which are openly visible or manifest vs those that are concealed or latent, and the other a difference between things that are or may be "in place" through a process that is

beyond their control, vs others for which this is not necessarily so. With respect to the first of these axes, *pe-* and *le-* are on the LATENT side of opposition and *mol-*, *o-* and *angaly-* on the MANIFEST. With respect to the second, *le-* and *angayl-* are on the PLACED side of the opposition and *pe-* and *mol-* on the other. These semantic specifications are displayed in Figure 1.

	PLACED	
	+	-
LATENT	<i>le</i>	<i>pe</i>
MANIFEST	<i>angaly</i>	<i>mol</i>

Figure 1. Feature analysis of four Ku Waru existential verbs

I now turn to aspectual uses Ku Waru posture verbs, parallel to the use of *kata-* in Enga as exemplified in (21) above. There are at least two of the erstwhile existential verbs in Ku Waru that also have aspectual uses: *mol-* and *pe-*. A *mol-* example is:

- (48) nyil moluringl
say.2/3DU.NF *mol*.RP.2/3DU
'The two of them kept on talking.'

Simpler than the Enga aspectual construction, this Ku Waru one does not make use of a complementizing suffix, but merely uses the non-final form of the verb which predicates the action, followed by a form of the verb *mol-*, which can be either in the fully inflected, final form as in (48) or in non final form as in:

- (49) mel kis aku-ma midi lalyil
 thing bad those just put in string bag.2/3DU.NF
 lalyil mek mek molkuk meri
 put in string bag.2/3DU.NF carrying carrying mol.2/3PL.NF down
 uring mek molkuk uring
 come.RP.2/3PL carrying *mol.2/3PL.NF* come.RP.2/3PL
 ‘They kept on bagging those rubbish things and bringing them and they
 came there, kept on bringing them and came.’

An example with preverb *kuikai* 'blow, wave about' which occurs with the verb *nyi-* is:

- (50) ilyi noba we kuikai nyi-molurum
this eating nothing blow about do-*mol.RP.3SG*
'It [the fire] was burning, blowing this way and that.'

- (51) kubikulyuwa-na upiye talapa oba aima tepa molurum
 face-LOC bug imitating coming really doing *mol.RP.3SG*
 'It kept on acting like an upiye bug and coming up at her face, it just
 kept on doing that.'

As the preceding examples show, many instances of the aspectual use of *mol-* fill a semantic/structural gap left by the fact that there is no paradigmatic habitual/non-habitual, or durative/non-durative contrast in the past tense as there is in the non-past, between 'present' and 'habitual' (see Merlan and Rumsey 1991:329).

The verb *pe-* likewise has a durative aspectual use, where a predication relates to entities (such as *ung*, *numan*, and certain understood notions such as 'situation, matters' which may not be lexicalized) of which *pe-* is typically used to predicate existence. Thus one finds:

- (52) i tepa pelym
 this doing *pe.HAB.3SG*
 'Things are thus, the situation is like this.'
- (53) kinye gavman lo kani-yl gi nyi-pekim
 today government law this-DEF tight do-*pe.PPR.3SG*
 'Now government law is tightening up on it [tribal fighting].'

In these clause-level aspectual functions it is doubtful whether the difference in value between *pe-* and *mol-* can still be said to involve the semantic features LATENT VS. MANIFEST. The difference between them in this context would seem to be one of degree of imputed durativity: as suggested by the examples, *mol-* predicates durativity within the bounds of some discrete event, while *pe-* predicates it of some general, more-or-less indefinitely extended state of affairs.

4. The semantics of posture verbs and existentials: Enga and Ku Waru compared

Having discussed and exemplified the existential constructions of Enga and Ku Waru, I will now consider the relationship between the semantics of the verbs in these constructions and in their lexically more specific uses in predications of standing, sitting, and lying. This is an issue that is given rather short shrift in Lang's treatment of the Enga data, because of her now rather dated-seeming transformational framework, in which she analyzes all seven of the Enga existential verbs as alternative surface-structure realizations of a single underlying verb BE, which are transformationally derived by a rule of 'feature spreading', where it is assumed that the choice among the seven alternatives is conditioned by the relevant semantic features of the subject NP ($\pm$ animate, $\pm$ heavenly, $\pm$ leafy, etc.).

It is only in an endnote (Lang 1975:63, note 4) that she even lets the reader in on the fact that not only *pita-* and *kata-* (as in 14 and 15), but all seven of the verbs used in Enga existential clauses have corresponding, lexically more specific meanings, as I have shown in Table 1 (cf. Foley 1986:90). And after exemplifying these alternative, lexically specific meanings, she immediately adds: “However, it must be stressed that the EV have only the single meaning *be*, with seven different surface manifestations; the deep structure is the same” (Lang 1975:63, note 4).

This rigid separation between nominal and verbal semantics is unfortunate, because it treats the formal identity between *these particular* lexical verbs and the ones occurring with specific nouns in existential clauses as totally arbitrary and unmotivated, notwithstanding the potential connections there are between the verbal semantics of posture or stance and the nominal semantics of size, shape, and position. That there are such connections in both Enga and Ku Waru will be evident from the discussion and examples above. Indeed, in the Ku Waru case, although I have treated the ‘existential’ uses of the five verbs discussed above as distinct from their lexically more specific ones, I would see the difference as a matter of degree in this language. There are, as far as I know, no formal grounds on which the existential uses may be categorically distinguished as we have seen for Enga above with respect to (16) and (17). It is the case in Ku Waru as in Enga that there are certain unmarked or ‘default’ options for predicating existence in a way that presumes the least about the state of posture of given referent (e.g., *mol-* for people as opposed to any of the other options in (32)–(35); cf. (12)–(15)), and there are many nouns that always or almost always occur with just one of the five verbs in predications of existence, especially in possessive clauses such as (27)–(31). But I would not see the verb in any of these cases as completely “bleached” of lexical specificity, reducing it to a mere combinatory variant of a single underlying verb ‘to be’, as Lang claims for Enga. In their existential uses the five Ku Waru verbs do all predicate existence or ‘being’, but each with some qualification as to the *mode* of being, either of the referent of the subject NP, or of wider class of things with which it is identified.

In order to be more explicit about the relevant modes of being that are involved here it is useful to refer to Newman’s interesting discussion (this volume) of patterns of polysemy associated with the verbs ‘sit’, ‘stand’ and ‘lie’. For analysing these, Newman proposes a number of distinct dimensions of contrast, each one of them based on one of the central components of what he takes to be the meanings of those verbs. The first is a component that is common to all three of these verbs and distinguishes them all from many others along a dimension of ‘internal complexity’ of the predicated event relative to the passage of time. Along this axis, the three verbs have in common that they are all ‘static’, in that ‘there is a strong sense of the extension of a state through time’. This attribute of all three can certainly be related to their adaptation for use as existential verbs in Enga and

many other languages. It is a feature that they share with most of the other verbs used as existentials in Enga and Ku Waru.¹²

A second axis, that of 'spatio-temporal profile', involves features of sitting, standing, and lying that distinguish them from each other, i.e.: for *sit*, 'relatively compact position'; for *stand*, 'vertical elongated position'; and for *lie*, 'horizontal elongated position'. A third axis involves differences of 'active zone' (but-tocks/legs/whole body) and a fourth involves 'force dynamics' (medium/high/low degree of control and balance). Of these latter axes, it is the second, 'spatio-temporal profile' that plays the most important role in the semantics of existential clauses in Enga.

Thus, among animate nouns for terrestrial beings, in we have seen that the main contrast is one between objects which are (stereo-)typically compact/squat/roundish vs those the are large/upright/elongate, that the EV used for the former is identical to the verb for 'stand' (*kata*-), and the verb for the latter is identical to the verb for 'sit' (*pita*-). As to 'lie' verbs, the picture is complicated by the fact that Enga has two distinct ones that enter into the EV system: *sa*- glossed simply as 'lie', and *pala*-, 'lie inside'. The latter plays the biggest part in the classification of animates, where the relevant aspect of the lying posture is not horizontal orientation or elongation, but the relatively low degree of prominence or visibility which this posture entails (this verb being used for species with a subterranean habitat). This is perhaps an example of the role of what Newman distinguishes as a separate, sixth axis of contrast, namely 'typical social/cultural significance', relative visibility or prominence vs invisibility or concealment being matters which are subject to a good deal of explicit attention and cultural elaboration in the Western Highlands (Merlan and Rumsey 1991:224–35) as elsewhere in Melanesia (Barth 1975, Jorgensen 1981, Wagner 1986:133–5). By contrast, for inanimate objects, the semantically less highly marked verb *sa*- ('lie') plays a bigger part, and the entailed postural association 'horizontal elongated position' seems to be more of a factor — nouns of this class including, for example: *yuú* 'land', *eé* 'garden', *mandáú* 'marsh', *íma* 'ridgepole', *pálo* 'room', 'pig stall' and *lita* 'boundary'.¹³

Now let us consider the Ku Waru case. Given the similarities in the grammar of existentials as between this language and Enga, an important difference to note between the two is that Ku Waru has no lexically simple way of expounding the idea of sitting. By itself this fact about Ku Waru is not very surprising, since the language has very few monolexic verbs.¹⁴ In our twenty years' experience with the language, Francesca Merlan and I have discovered only fifty-seven of them.¹⁵ As in many Papuan languages, verbal notions are generally expressed compositionally, through a combination of two or more verbs in series, with more or less idiomatic meanings associated with various combinations of them (Foley 1986:113–17); or through the combination of an inflected verb with a lexically

specific element of the sort generally referred to by Papuanists as a ‘verbal adjunct’ (Foley 1986: 117–28). While the verbs *angaly-* and *pe-* can in certain contexts be used by themselves to mean ‘sit’ and ‘stand’ respectively (as in 33 and 35), the notion ‘sit’ can only be expressed compositionally, through the kinds of constructions I have mentioned above, of which there are many for describing various *kinds* of sitting. Examples are: *tekawala mol-* ‘sit cross-legged’, *sunu mol-* ‘sit with the legs extended straight out’ *kara to- mol-* ‘sit with the legs drawn up’, ‘crouch’. It will be noted that the final, inflecting verb used in all these examples is *mol-*, which is one of the five verbs used in existential clauses. This word cannot be used by itself to mean ‘sit’, and indeed also is used in some compositional expressions for kinds of standing. Perhaps the most common is *ola mol-* ‘stand up’. *Ola* by itself means ‘up’ or ‘high’. There is a parallel expression *manya mol-* ‘sit down’, *manya* being the word for ‘down’, ‘low’. This pair nicely illustrates the semantic neutrality of *mol-* with respect to the contrast between sitting and standing.

Given this absence of a middle term based on ‘sit’ within the inventory of existential verbs, in Ku Waru, unlike in Enga, one cannot find a coherent subset of the existential verb classes the semantics of which is based on a three-way contrast among spatio-temporal profiles associated with standing, sitting, and lying. Rather, what one finds instead, as I have argued above (cf. Merlan *et al.* 1997) is a coherent subset of four classes based on two cross-cutting distinctions between the features +/- PLACED and LATENT VS. MANIFEST. Although sitting does not figure in this system, the contrast between lying and standing can be seen as central to it. To see how, we need to consider two different dimensions of contrast among the posture verbs. The first is the one involving what Newman calls ‘spatio-temporal profile’, the relevance of which I have already discussed with respect to Enga existentials above.

Just as in the case of the Enga verb *pala-* ‘lie inside’, what is most relevant about the differences of spatio-temporal profile associated with ‘lie’ vs ‘stand’ in Ku Waru is not vertical vs horizontal elongation *per se*, but the typical differences of prominence or visibility that go along with these. So, for example, among the body part terms, those which take as their existential verb *angaly-* (which in its lexically specific sense means ‘stand’) do not all refer to parts which are vertical or elongated. Some of them are, such as *ki* ‘hand’/‘arm’ and *kib* ‘leg’/‘foot’, but many are not, including for example *mong* ‘eye’, *kum* ‘ear’ and *mai obil* ‘forehead’. What they all have in common is that they are openly visible in normal face-to-face interaction with others, all with frontal surfaces through which the body openly addresses the world beyond itself.

That this characteristic of them is more highly diagnostic of the class than elongation or verticality *per se* is shown by an exception that proves the rule: *obi* ‘penis’, despite its shape does not take *angayl-*, even when erect, but *pe-* (which in its lexically specific sense means ‘lie’; for referring to an erect penis as such the

expression used is *ola mol-* '(it) stands up'). The relevant fact is that men's penes in this part of New Guinea (unlike in some regions further to the west) are and were normally kept fully covered (traditionally by crocheted netting or cordyline leaves attached to a bark belt). The use of *pe-* in this example illustrates the converse point I have made above, that, although the lexically specific sense of this verb is 'lie', what is most typical of the EV class associated with it is not horizontal elongation but low visibility or prominence.¹⁶ In short, devoid of a middle term 'sit', the Ku Waru EV system makes use of a polar contrast between 'lie' and 'stand' which opposes them as LATENT to MANIFEST.

But that is not the only way in which they are opposed. As will be seen in Figure 1, the *pe-* 'lie' and *angaly-* 'stand' classes are also opposed along another axis, as associated with things that are typically PLACED, that is, put in place by design or necessity, vs those that are not. For understanding this other relevant axis of contrast between 'lie' and 'stand', Newman's analysis again proves useful. Consider what he says about 'lie' under the rubric 'force dynamics', namely, that it involves a low degree of control and balance, and requires no physical effort to maintain (Newman, this volume). This fact about the lying posture can be related to the feature value -PLACED in that deliberate placement of an object or of one's own body *does* normally require a degree of physical effort and control, so that a posture which does not require such control can be taken as a prototypical case of 'non-placement'. This being the case, the feature specifications of the Ku Waru *le-* and *mol-* classes can also be derived from aspects of the contrast between 'lie' and 'stand', since these two classes are also uniquely specified by their values along the two axes LATENT/MANIFEST and $\pm$ PLACED: with respect to the LATENT/ MANIFEST axis, *le-* is to *angaly-* as *pe-* is to *mol-*; but with respect to the $\pm$ PLACED axis, *le-* is to *pe-* as *angaly-* is to *mol-*.

5. Conclusions

Having described and compared the existential verb systems of Enga and Ku Waru, and their relation to the lexical semantics of posture verbs, I will now give a brief account of how these systems compare with those of other Papuan languages. I will then return to the issue of aspectual uses of posture verbs, and offer some concluding remarks about the differences between the way these are grounded in the inherent features of these various postures vs. the way in which the existential systems are.

A useful comparative survey of Papuan EV systems is contained in Lang (1975: 115–36) (cf. also Foley 1986: 88–91; Merlan *et al.* 1997). They seem to be an areal phenomenon, found in a block of largely contiguous languages extending from at least as far west as Mimika on the South coast of central Irian Jaya, across

the central New Guinea highlands to at least as far east as the Huon Peninsula on the east coast of Papua New Guinea, a distance of nearly one thousand kilometres. Of the languages within this region, Adrianne Lang has compiled data on the EV inventories of nine. Two are Enga and Melpa, the latter of which has virtually same EV system as Ku Waru. Her data on a third, Huli, is inadequate for present purposes as the lexical meaning of one EV is uncertain. The other six presumably represent a fairly random sample of the EV systems within the region, as they come from languages which are widely scattered over it, and which were selected mainly on the basis of available published data (which exists for only a small minority of Papuan languages).¹⁷ The following are the EV sets that Lang has compiled from these, plus one more (Imonda) that I have taken from a more recently published source (Seiler 1985; see also Merlan *et al.* 1997:93–7, 99–100). Each verb form is followed by a list of typical referents with which it is associated. The order in which the languages are listed corresponds to their geographic location moving from west to east.

1. Kamoro

ame 'stand': people, houses, trees (alone, singular), vertical, high, and tall or slender things.

epe 'sit': pots, dishes, pans, boats on land, plants, mountains, clouds, and celestial bodies

kai 'lie': land, rivers, lakes, fallen trees or wood

mariki 'float': fish, people in canoes, anything floating on water

naa 'be there', 'be above': hanging objects, small things, big masses such as a heap of rice or a pile of sago, things lying on top of something else

2. Asmat

em 'stand': men, trees, upright poles, anything that is tall and slender

ap 'sit': women, houses, carrying bags, anything that is about as high as it is broad

amia 'lie': small animals, reptiles, fallen trees, the just-risen sun or moon, anything that is much broader than it is high, or is low to the ground

se 'be in the water': fishes, canoes, rivers, anything in or on the water

tep 'be above': flying animals, hanging objects, objects stored away on the rafters of the house, anything that is above eye level

3. Kiwai

otoi 'stand': trees, mountains, food plants

erea 'remain', 'lie': objects in fixed positions which do not move

orou 'lie': persons or things lying down

4. Imonda

lōh 'stand': man, tree, house, star, moon, sun, night, garden, story, talk, ground, sand

ale 'sit': woman, mosquito, dog, bird

li 'lie': water, egg, stone, netbag

ialuō 'be': 'an existential verb without semantic content. It may be used with any noun' (Seiler 1985:159)

sugō-ula: primarily a transitive verb meaning 'hold' or 'have', but sometimes also used intransitively as an existential verb; semantic range of possible subject NPs is unclear

5. Enga (Table 1 in sec. 2 above)

6. Ku Waru (see sec. 3 above)

7. Banz (Middle Wahgi)

mem 'is' (in the sense of apposition or identity, and in the sense of 'is present'): bird, stomach, bottle, cassowary, tree, dog, pig fence, lizard, cockatoo, patrol officer

tem 'put' (connotes possession, and refers to a temporary presence of impersonal objects): book, river, axe, rat hole, eggs, places, road

pam 'exists', 'rests' (connotes a permanent state of being): fire, work, earth, sun, name, nose, mouth, word, car

8. Sinasina

mongwa 'is' (used with animate beings and the word for water; in the sense of apposition or identity, and in the sense of 'is present')

yongwa 'put' (connotes possession and refers to a temporary presence of inanimate objects)

pongwa 'exists', 'rests' (connotes a permanent state of being)

dungwa 'says' (inanimate objects and used to state a fact)

9. Kâte

doma 'stand': coconut palm, lamp, said of long objects

e 'sitting': village, places, bird, car, bottle, house, woman, mountain; said of short, wide objects

fo 'lying', 'sleeping': river, coconuts, wine, pen, bananas, sweet potato, knife, wire, boards

ju 'living': man, boy

In view of the topic of this volume, the first thing to notice about these lists is how many of the EV sets include terms with lexically specific meanings from among the set: 'sit', 'stand' and 'lie'. Five of the nine languages include the full complement of these three posture verbs within their EV inventories: Kamoro, Asmat, Imonda, Enga, and Kâte.¹⁸ Of the other four languages, two of them, Ku Waru and Kiwai, include two of the three posture terms; in both cases the two terms included are 'stand' and 'lie'.

Among all of the EV sets which make use of these posture verbs, there are broadly similar patterns in the nature of the typical referents they are said to be associated with. In all of them, shape is an important factor. The 'stand' class is associated with typical referents which are vertically elongated, including trees and men in all seven of the sample data sets. The 'lie' class generally includes things which are horizontally elongated or low to the ground. While only a small number of examples are available for each language, there is general agreement in the *kinds* of typical referents included in each of these two classes. Except in one language, Imonda, there are no cases of 'cross-over' between the two classes, where a given referent type is associated with 'stand' in some language(s) and with 'lie' in others.¹⁹

When we bring 'sit' into the picture, two more cases of apparent cross-over appear in other languages. One of them involves 'mountain', which goes with 'sit' in Kamoro, Enga, and Kâte and with 'stand' in Kiwai. This may have something to do with people's very different experience of mountains in these various areas. The Enga, Kamoro, and Kâte all live within, or within sight of extensive mountain ranges, while the Kiwai live on the outer edge of the largest alluvial plain in New Guinea, where their only relevant experience is with isolated small hills, the closest mountain of any size being Mount Bosavi, which is an extinct volcano rising dramatically from the surrounding lowlands to a height of 2,469 meters. In any case, most mountains in New Guinea as elsewhere are about as broad at the base as they are tall, so neither dimension is as likely to be decisive as is, for example, the vertically elongate profile of most tree species.

A more decisive fact to note about Kiwai is that 'mountain' *could* not be assigned to the 'sit' class in this language because the language has no such class — only a 'stand' class and two 'lie' classes. None of these classes can be treated as equivalent to ones in Kamoro, Enga or Kâte, since all the referents of 'sit' classes in these languages have to be assigned instead to a 'stand' or 'lie' class in Kiwai. In other words, the Kiwai placement of 'mountain' in the 'stand' class is not a true case of cross-over.

The other, true case of it involves 'house', which goes with 'stand' in Kamoro, Imonda, and Enga, and with 'sit' in Asmat and Kâte. Among the languages whose EV systems do not have a 'sit' term, the only one in this sample for which we know the class assignment of 'house' is Ku Waru, where it is of the *angayl*- 'stand' class. But in that case, as discussed above, the relevant features are not verticality or vertical elongation per se, but the 'manifest', prominent quality of houses within the visual field, and the fact that they are put in place by design.

Returning now to the languages which do have both a 'sit' class and a 'stand' class (all of which also have one or more 'lie' classes), it is interesting to notice how many of them treat 'man' and 'woman' in the same way as we have seen above for Enga (sec. 2), associating 'man' with 'stand' and 'woman' with 'sit'. This is true of at least four out of the five languages that have both of these existential

verbs, including languages as widely separated as Asmat, in south-central Irian Jaya and Kâte, on the Huon Peninsula at the eastern end of mainland New Guinea.²⁰ As compared with the less tightly-relational nature of concepts such as ‘mountain’ and ‘house’, the ‘man’–‘woman’ case shows the importance of systematic contrast within specific semantic domains — what Saussure called ‘relative motivation’ — for understanding the way in which posture terms grounded in the characteristics of a single referent type — the human body — are mapped out onto the rest of the world. For in order to understand why ‘woman’ should be placed in the ‘sit’ class, one has to see that what is most relevant is not how the female body compares in shape with every other kind of thing the world, but how it compares with one particular kind of thing, the male human body. The fact that women are, for example, more vertically elongate when standing than houses does not preclude their being placed in the ‘sit’ class and ‘house’ in the ‘stand’ class, since the relevant comparison is not to houses but to men. The fact that their placement within that class is more consistent than that of houses in any one class is, I maintain, a function of their firm placement with respect to a homologous difference between terms in the EV systems, i.e., man is to woman as stand is to sit.²¹

This example also shows once again the decisive part played in such classifications by what I have called “stereotypes”. Not only are women more vertically elongate than houses (at least when standing), some of them are more so than many men, as I have pointed out above. But these differences are ignored in favour of opposing idealized versions of the respective body types — stereotypes that, in light of the comparative evidence above, we can see are grammaticalized across a very extensive region within New Guinea.

So far in this section I have been discussing the use of posture verbs in existential verb systems, trying to place the Enga and Ku Waru cases within a wider range of comparable phenomena from other of Papuan languages. Before concluding the chapter I will briefly turn to the other grammaticalized use of posture verbs that I have discussed in Sections 2 and 3 above, namely the use of them as aspect markers in serial verb constructions.

In Enga, as we saw in sec. 2, the ‘stand’ verb *kata-* in certain clearly defined syntactic environments plays a part in the marking of what Lang calls ‘progressive’ aspect. She gives only one example of this (reproduced as (21) above), and it is a complex one which also involves reduplication of the verb predicating the action itself, the overall aspectual value apparently being something like ‘do repeatedly at length’. Notwithstanding Lang’s labelling of this as ‘progressive’, it seems that there are really two distinct aspectual components involved here, an iterative and a continuative one. On both logical and typological grounds²² it would seem likely that these two components are being expressed by distinct formal features of the construction, the iterative by the reduplication (in this case of the verb *pya-* ‘hit’)

plus ‘progressive’ suffix *-ma*, and the continuative aspect component by the verb ‘stand’ verb *kata-*. But from the account given by Lang it is not possible to determine whether these two semantic components map onto the separate formal features of the construction in this way, because we are not told whether the ‘stand’ verb can be used to express continuative aspect in other syntactic environments where it does not co-occur with reduplication and the suffix *-ma*, nor what difference there is in meaning, if any, when a “conjugated version of the verb indicating the action” is used instead of the ‘stand’ verb *kata-*.

There are no such complications in the Ku Waru case, where, as I have shown above (48)–(53), two of the verbs used in existential constructions, *mol-* and *pe-*, can also be used in sequence with another, preceding verb to qualify it with aspectual meanings, durative and extended-durative respectively.

Enga and Ku Waru are by no means unusual among Papuan languages in using their posture-cum-existential verbs this way. In his book *The Papuan Languages of New Guinea* Foley cites examples from a range of Papuan languages which are as widely dispersed and otherwise different from each other as the ones whose EV systems I have compared above. I will not reproduce the examples here, but only note that they include Enga, and five others, and that the posture verbs used in them to express ‘extended action’ are ‘stay’ in Karam, Fore, Iatmul, and Dani, and ‘be at’ in Vanimo (Foley 1986: 143–5). When we add the Enga and Ku Waru examples from above it is apparent that in every case the verbs chosen are ones which in their lexically most specific meanings are typically used to describe actions or states that last for a long time. As Foley (1986: 145) puts it: ‘one does not normally stay, stand or lie for an instant; rather these actions are inherently durational, and this semantic fact reinforces their eligibility as grammatical indicators of extended aspect’. Contra Foley, I would not see these facts about what people “normally” do as part of the *semantics* of posture verbs, but rather as “stereotypes” of the same order as the ones which I have been discussing above when dealing with nominal classifications based on shape and size.²³ But it seems to me incontrovertible that, in that capacity, they do play the role that Foley attributes to them.

Consider in this connection the Ku Waru case, where two distinct verbs figure in the serialized aspect constructions I have been discussing above: *mol-* which in its postural applications (in combination with various modifying elements) is used for kinds of standing and sitting, and *pe-*, which, by itself or with modifying elements is used to mean ‘lie’, or for kinds of things that one does lying down (sleep, fuck, etc.). It is not the case that one always lies down for a longer time than one sits or stands, but, given the features of the human body that Newman describes under the rubric ‘force dynamics’, it is inherently more difficult to maintain a standing or sitting position than a lying one and, correspondingly, one *typically* lies down for longer than one sits or stands. So, while any of the posture

verbs can and do serve in various languages to express extended duration (since all of the postures are at least potentially ‘static’ (Newman, this volume), when a further aspect contrast is made by drawing on differences *within* the set of postures, ‘lie’ (as opposed to ‘stand’ and ‘sit’, in that order) is the most appropriate candidate for expressing the greatest *degree* of extended duration.

Note that the dimension of contrast among the posture types that is relevant here in the Ku Waru aspect system is quite distinct from the ones which we have seen to be operative above in the EV system. The features that are relevant in both cases have to do with stereotypes, but in the aspect system these are based on factors of ‘force dynamics’, whereas in the EV system they are based on attributes of what Newman calls ‘spatio-temporal profile’, and its entailments along the axes of relative prominence and likelihood of ‘placedness’. The comparisons I have made with Enga and other Papuan languages show that there is a similar linguistic division of labor in all of them between the kinds of postural features that figure in aspect systems and the kinds that figure in EV systems. More generally the evidence from all these languages confirms once again what a rich field of possibilities is afforded by the three basic human postures for various kinds of metaphoric appropriation and grammaticalization in the languages of the world.

Abbreviations

AG=agentive; COL=collective; DEC=declarative; DEF=definite; DET=determiner; DU=dual; FUT=future; GEN=genitive; HAB=habitual; IDF=indefinite; IMP=imperative; INF=infinitive; LOC=locative; NF=non-final verb; NP=noun phrase; O=O-complementizer; PPL=participle; PL=plural; PPR=present progressive; PRF=perfective; PRG=progressive; PRS=present; Q=question; RP=remote past; SG=singular; STA=stative; -=morpheme boundary; .=morpheme boundary not shown in top line; 1=first person; 2=second person; 2/3=second or third person; 3=third person.

Notes

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1. The form of the verb root is in each case somewhat different from its citation form given above, presumably affected by vowel harmony with the following habitual aspect suffix.
2. Lang does not call them this. Somewhat confusingly, she says that the Enga existential

verb “has a meaning that corresponds to that of the English copula, *be*” (Lang 1975:41). This fails to recognise that English *be* in fact serves distinct copular and existential functions which in many languages, including Enga, are formally distinct, the latter being marked by zero.

3. Unless otherwise indicated, the forms shown in these examples are taken from Lang (1973).

4. Here again, the facts of the matter, as least as far as a biologist would define them, are to some extent reshaped to fit the stereotypes; among the Hewa, near neighbors of the western Enga, the anthropologist Lyle Steadman has reported that male cassowaries are classified as female, since the males sit on the eggs, and female cassowaries are classified as male (Lang 1975:79, note 6).

5. Taro (*mađ*) is an exception, falling within the *kata*- ‘stand’ class. This is perhaps to be related to the fact that it is by far the biggest of the tuberous cultivars, grows upright within the ground, has vertical stalks rather than creepers, and is cultivated largely by men.

6. In our earlier published descriptions of the Ku Waru EV system (Merlan and Rumsey 1991:338; Merlan, Roberts, and Rumsey 1997:71–81) we did not treat *o*- as one of the EV set, perhaps because in its lexically specific use, its meaning is active rather than stative. But further review of our Ku Waru data and comparison with the Enga system has convinced Merlan (pers. com. Feb. 2001) and me that this was a mistake and that *o*- should be treated as one of five Ku Waru EVs. How to integrate our analysis of its semantics with that of the other four is a problem that will require further work on our part.

7. For more details concerning these and other clause types in Ku Waru, see Merlan and Rumsey (1991:337–43) and Merlan, Roberts, and Rumsey (1997:67–71).

8. The same is true of many other languages, but in most such languages, the ‘possessor’ NP is placed in some oblique case such as the dative, whereas in Ku Waru it goes into the absolutive, as the secondary argument in what we elsewhere refer to (Merlan and Rumsey 1991:337–43) as a type III or ‘double absolutive’ clause.

9. The expression ‘has no nose’ is frequently used in Ku Waru to mean ‘has only a small nose’, rather like English ‘has practically no nose’. Since large, straight noses are considered attractive and small ones ugly, this is a disparaging remark, and exaggerated accordingly by saying ‘no nose’ rather than ‘a small nose’ (*kubi keli*) or the like.

10. The only difference between Ku Waru and most other Papuan languages in this respect is in its use of Absolutive case for the ‘possessor’ NP as well as the ‘possessed’ (cf. note 8 above).

11. It is relevant to note here that Ku Waru people are highly fastidious about where they defecate, nowadays usually in enclosed latrines, and regard human faeces “out of place” as extremely disgusting, not to say distressing.

12. The exceptions are verbs for ‘come’ in both Enga and Ku Waru (*o*- and *ipa*- respectively), and a verb for ‘carry’ in Enga (*manda*-).

13. In keeping with this functionally less marked status, *sa*- is also distributionally less marked, being in fact the verb which is used with a larger number of nouns in the lexicon than any of the other six existential verbs (Lang 1975:149–55). By contrast the verb *pala*- ‘lie inside’ comes in fifth out of the seven (*ibid.*).

14. Even in languages with many monolexemic verbs, 'sit', 'stand' and 'lie' are not always among them. Newman (this volume) points this out, using French as an example of a language where they are not.
15. Given the smallness of this inventory of full-fledged inflecting verbs, one might expect them all to be what we would consider "core" vocabulary items. But this not the case. While a good many of them meet this description, (*o-* 'come', *pu-* 'go', *no-* 'eat', *kan-* 'see', etc.) many others do not. The meanings of some of them are quite complex and of a kind that very few other languages elsewhere in the world would have a single, monomorphemic lexical item for, e.g., *laly-* 'put into a string bag' (see ex. 49), *mals-* 'clean up excrement', *bor-* 'take cooked food out of an earth oven' *apr-* 'pick up off of the ground'.
16. As I have pointed out above, the Ku Waru *pe-* class in this respect resembles the Enga EV class associated with the (possibly cognate) verb *pala-*, for which we have seen above (sec. 2) that the same was true. In Enga the inner-vs-outer dimension of contrast is subject to a higher degree of lexico-grammatical elaboration in that *pala-* has as an explicit component of its lexical semantics the notion of interiority — of lying *inside* something. Low visibility or invisibility can be seen as an entailment of this. In any case in Enga it is the *pala-* class rather than the *sa-* 'lie' class which seems to more closely resemble the Ku Waru *pe-* class, associated as it is with things which are hidden from view.
17. The only way I know of in which this sample may be somewhat skewed is that it contains two fairly closely related languages, Banz and Sinasina, both from the Chimbu family of the central New Guinea Highlands; both of these languages are also related to Ku Waru, which belongs to the same family.
18. The proportion within the entire block of languages may well be higher, since three of the four languages in this sample without all three of the posture verbs belong to a single family whose EV system is semantically anomalous within this block (Lang 1975:131).
19. Imonda is exceptional in placing 'garden', 'ground' and 'sand' into the 'stand' class, whereas other languages place them into the 'lie' class. Seiler (1985:158) points out that the 'stand' class in Imonda includes "many nouns whose referents are not intrinsically tall or erect". He does not make the converse claim, that the 'sit' and 'lie' classes include within them nouns whose referents *are* intrinsically tall or erect, and there are none among the examples he gives for those classes. But note that the Imonda EV set is different from all the others in another way as well, i.e., in including a verb that is totally without semantic specificity (*ialuō*), and another whose semantic range is unclear (*sugō-ula*). This low degree of semantic systematicity of the Imonda EV set in general can probably be related to the fact that the language has another, more extensive and productive system of nominal classification realized through verbal prefixes which have developed historically from serial verb constructions (for details see Seiler 1986, Merlan *et al.* 1997:93–101).
20. I say "at least four" because information is not available from Kamoro regarding the verbs used in existential clauses referring specifically to men or women. Drabbe says 'people' are of the 'stand' class, but that does not necessarily mean that women are of that class when referred to as such. This is shown by what happens in Enga, where *endakáli* 'people', 'human being' (a compound formed from the words for 'woman' and 'man', as in many Papuan languages) is of the 'stand' class (Lang 1973:20), but *énda* 'woman' is of the 'sit' class.

21. One of Lang's informants explained it this way. Men go with 'stand' because they are "active, usually standing, fighting or chopping trees". Women go with 'sit' because they "like to sit, and are usually sitting minding the children and infants, cooking, or planting the garden" (Lang 1975:64, notes 10 and 11).
22. For a typological parallel from the Australian Aboriginal language Ungarinyin, see Rumsey (1982:121), where distributionally independent iterative and continuative suffixes are shown to optionally combine within a preverb + auxiliary construction, marking what I call the 'compound aspect' value 'iterative-continuative'.
23. Here I would also take issue with Newman's treatment of what he calls the *meanings* [my emphasis] of 'sit', 'stand', 'lie' (Newman, this volume). The problem is not with his analytic distinctions, which on the contrary I find very insightful and valuable, as evident in my use of them above. Rather, the problem is that several of the attributes he has specified in his unpacking of 'stand', 'sit' and 'lie' do not belong to the denotation or sense of these words, but to the realm of actual bodily experience that they are used in reference to. Here I am thinking especially of the attributes Newman describes under the rubrics 'force dynamics' and 'typical cultural significance'. It is doubtful whether any of these features should be seen as *definitional* of 'sit', 'stand' and 'lie', at least in English, since they do not invariably obtain, and since these words can be defined without reference to them. But the corresponding facts about sitting, standing, and lying do figure as central aspects of our typical *experience* of these respective bodily postures, which I would see as comprising a kind of common, infra-linguistic stratum of the human condition, subject to varying degrees and kinds of lexicalization and grammaticalization from language to language, as Newman's own use of his analytical framework makes clear.

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CHAPTER 9

Posture, location, existence, and states of being in two Central Australian languages

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1. Introduction

In many languages of Aboriginal Australia and elsewhere, verbs of posture are used for a wide range of positional, locational, existential, and copula-like functions, in addition to depicting human postures such as standing, sitting, and lying. In this chapter we examine the range of use of the relevant verbs in two languages of Central Australia — Pitjantjatjara/Yankunytjatjara (P/Y) and Arrernte — which are geographically contiguous but not closely related genetically. Using semantic and syntactic tests and procedures, we tease apart different meanings and uses of these verbs in the two languages.

We take the view that, even for the purposes of general linguistic description of the kind offered here, it is necessary to have some semantic framework. Without some theory of meaning in language, we would have no criteria for deciding whether or not a lexical item has one or more senses, and if so, how discrete these are from one another, in what way they are related, and what are the correlations between their meanings and their grammatical properties. Working within the natural semantic metalanguage (NSM) framework (Wierzbicka 1996, Goddard 1998), our aim in this chapter is to give a semantically informed description of these verbs and their functions, though we stop short of a comprehensive analysis of their lexical content. After our descriptive account, we return to a brief discussion of relevant semantic issues in the concluding section.

The languages

Pitjantjatjara and Yankunytjatjara (P/Y) are closely related dialects of the Western Desert Language, which is still spoken by several thousand people in the remote north-west of South Australia and adjacent areas (Douglas 1964; Goddard 1985, 1996a; Eckert and Hudson 1988).¹ Arrernte is spoken by a similar number of people to the north of P/Y, centered on the town of Alice Springs in the

Northern Territory. The variety of Arrernte described here is Central (Mparntwe) Arrernte (Wilkins 1989; Henderson and Dobson 1994; see also Green 1994). A variety of texts have been published in both languages.² The two language groups pursued a similar traditional lifestyle and economy, as highly mobile hunter-gatherers, and had similar traditional religion and cosmology (Dreaming Law). Their traditional systems of knowledge encompassed very detailed geographical knowledge and excellent navigational abilities, and could be regarded as strongly place-oriented.

The two languages belong to the 'Pama-Nyungan' grouping, and as such can be characterized as agglutinative (chiefly suffixing), with a well-developed system of nominal and verbal derivation. Phrasal ordering is flexible, with a preference for core NPs to precede and other NPs to follow the verb. Constituent order is fixed within the noun-phrase, with the head preceding all modifiers. Ellipsis of 'understood' third-person arguments is very common.

The case system of both languages is of the so-called 'split ergative' type. In this chapter we follow Goddard (1982, 1985) and Wilkins (1989) in recognizing three core cases: nominative, accusative, and ergative, applying to NPs in S, O, and A functions, respectively. The split marking pattern can then be simply described as follows: Pronouns have identical (zero-marked) nominative and ergative case forms, whereas other nominals have identical (zero-marked) nominative and accusative forms. For most NP types, case-marking applies only to the final word of the phrase. In both languages, verbs strictly subcategorize their subjects for either ergative or nominative case. Verbs inflect for tense-aspect-mood, but not person. In P/Y, but not in Arrernte, there is a system of four conjugation classes, strongly correlated with the transitivity and mora-parity of the verbal stem. Arrernte, on the other hand, has a richer system of verbal inflection and derivation. In both languages, it is standard lexicographic practice to cite verbs in their present tense forms, and we follow this practice here.

Broadly speaking, we find reasons to distinguish, as separate meaning types or functions: posture, position, situation/behavior, existence, general location, copula function, and auxiliary function. We will first discuss and exemplify the basic postural meanings in both languages, then discuss their other lexical and grammatical meanings and functions.

2. Posture

Examples (1)–(3) illustrate the P/Y verbs *nyinanyi* 'sit', *ngarinyi* 'lie' and *ngaranyi* 'stand' in their plain postural meanings, with human subjects. There is a further verb *pupanyi* 'be crouched over, bent over', which can be used of buildings, such as the traditional shade-shelter, which have a rounded shape. All three verbs are

intransitive, taking nominal subjects in nominative case, optionally accompanied by a nominal in locative case.

- (1) Munu-la **nyina**-ngi nyanytju-ngka itingka, yuu-ngka. **Nyina**-ra
 ADD-1PL sit-P.IMPF horse-LOC near windbreak-LOC sit-SER
nyina-ra nyanga-ngi-la palunya.
 sit-SER see-P.IMPF-1PL 3SG-ACC
 ‘We were sitting near them (i.e. some horses), in a windbreak. We sat there for some time watching them.’
- (2) Iti panya piti-ngka **ngari**-nyi.
 baby that wooden.bowl-LOC lie-PRES
 ‘The baby is lying in the piti bowl.’
- (3) Ara-ngka ara-ngka **ngara**, panya nyupali
 same.place-LOC same.place-LOC stand(IMP) you.know 2DU
ngara-ngi kuwari panya.
 stand-P.IMPF now that
 ‘You two stand in the same places that you were standing in just now.’

All three are strictly stative. To create active verbs referring to a change of position, one uses the derivational suffix *-kati* PROCESS; hence, *ngarikatinyi* ‘to lie down’, *nyinakatinyi* ‘to sit down, come to a sitting halt (e.g. a bird landing)’, *ngarakatinyi* ‘stand up, come to a standing halt’. There are also transitive counterparts formed by compounding with the verb *tjunanyi* ‘put’: *ngaratjunanyi* ‘put into a lying position’, *nyinatjunanyi* ‘put into sitting position’, *ngaratjunanyi* ‘put into a standing position, put upright’. In their postural meanings, each of these verbs participates in a range of other more or less idiosyncratic collocations, compounds, and derivational formations. For example, with *nyinanyi* we have the expressions *ngatarpi nyinanyi* ‘sit cross-legged’, *nyuṭi-nyuṭi nyinanyi* ‘sit with the legs curled beneath one’, *tjilinyinanyi* ‘squat on haunches’, and the adjective *nyina-nyina* ‘(of baby) one who can just sit up’.

In relation to its plain postural meaning, it should be noted that *ngaraṅnyi* ‘stand’ does not necessarily require that the subject be absolutely stationary. In example (4), the referent is standing behind a tree, moving around it so as to remain out of sight.

- (4) Ka kumpi-ṛa para-kumpi-ṛa **ngara**-ngi, waṭa-ngka.
 CONTR hide-SER around-hide-SER stand-P.IMPF tree.trunk-LOC
 ‘He was standing moving around, keeping concealed behind the tree.’

Examples (5)–(7) show comparable uses of the basic posture verbs in Arrernte: *ane-me* ‘sit-NPP’, *tne-me* ‘stand-NPP’, and *inte-me* ‘lie-NPP’. Only one of these is cognate with its P/Y counterpart: *ane-* ‘sit’ is cognate with P/Y *nyina-* ‘sit’, via

regular historical processes of vowel reduction and initial syllable dropping.

- (5) Tyerrtye nhenhe ulye-le **ane-me**.
 person this shade-LOC sit-NPP
 ‘This person is sitting in the shade.’
- (6) Ampe akweke ulpaye-le **inte-ke**.
 child small creek.bed-LOC lie-PC
 ‘The baby lay in the creek-bed.’
- (7) Kweye are-ye, arnkwerte-arnkwerte **tne-tyele-aye!**
 girl see-PER crooked-RDP stand-NEG.IMP-EMPH
 Tyerte-pe-arteke **tne.rne-irre-aye!**
 straight-more-like stand.with-INCH-EMPH
 ‘Girls, don’t stand in a crooked line! Get in a straight line!’

As in P/Y, these three verbs have a broadly stative character, contrasting with more active counterparts: *arrernelheme* ‘sitting (oneself) down’, *akeme-irreme* ‘getting up’, *iwelheme* ‘laying oneself down’. A non-productive intensifying suffix, *-rtne*, seems to be unique to these three verbs, yielding derived forms *anertneme* ‘sitting up straight’, *tnertneme* ‘standing up straight’, *intertneme* ‘lying fully stretched out’. Unlike the situation in P/Y, most words for more specific sitting, standing, and lying positions are morphologically unrelated to the basic postural verbs, e.g., *arrkwinyere* ‘sitting with legs to the side’, *arntimerrke* ‘cross-legged’, *rlkerrelheme* ‘sitting with legs stretched out’, *unerntelheme* ‘stand leaning against something’, *atertneme* ‘squatting (with feet flat on the ground)’, *impalkerte* ‘lying on one’s back’, *ulperre* ‘lying on one’s stomach’, *rlkanye* ‘lying on one’s side’.

These three Arrernte verbs form a natural class, distinguished from other verbs by at least two syntactic properties: the ability to take the *-rtne* affix, and the ability to select as core arguments either a nominative and a locative argument (as in examples 5, 6 above) or a nominative argument with an attributive complement (see Section 5.2 below). In P/Y, the four verbs *nyinanyi* ‘sit’, *ngarinyi* ‘lie’, *ngaranyi* ‘stand’ and *pupanyi* ‘crouch’ are also distinguished as a natural class by similar properties: argument structure (as in Arrernte), the ability to occur with the *-kati* suffix, and the ability to form compounds with *tjunanyi*, as described above.³

Posture verbs in both languages can be used to describe the ‘posture’ of animals as well as that of humans. This is not the case in all languages, and there are reasons to believe that the usage in relation to animals involves a slightly different meaning — at least, if we take the primary meaning to focus on the prototype of the human body and human activity (cf. Newman, this volume). Note, however, that many of the native marsupials of Central Australia, especially the kangaroo and wallaby, are two-legged animals; and when they are not moving around they are more naturally described (even in English) as sitting, rather than

as standing. Hence kangaroos, etc. when at rest are always described as *nyinanyi* ‘sitting’, never as *ngaranyi* ‘standing’. The same goes for birds.

- (8) Kuṭa-ngku panya nyangu maḷu tjuṭa puṇu wilytja-ngka
 older.brother-ERG that see.PAST kangaroo PL tree shade-LOC
 nyina-nya-ngka. (P/Y)
 sit-NOML-LOC
 ‘The older brother spotted some kangaroos sitting in some shade.’
- (8a) Ampe-atye-aye, arrwe atningke apwerte-ke **ane**-me! (Arr.)
 child-1KIN.POSS-EMPH wallaby many hill-DAT sit/be-NPP
 ‘Son, there are lots of wallabies on the hill!’

(Here the Arrernte dative inflection is seen in its spatial function, probably indicating that the wallabies had moved onto the hill from somewhere else; cf. Wilkins 1989: 179).

In both languages, each of these verbs expresses a range of other, interrelated meanings which, taken together, far outnumber the postural uses. In the following section we go through the more “lexical” of these, in the sense of those meanings which are most specific or detailed in their content. Subsequent sections describe more general or schematic meanings, moving on to grammaticalized functions.

3. Position and situation/behavior

3.1. ‘Lying’

Ngarinyi ‘lie’ in P/Y and *inteme* ‘lie’ in Arrernte are typically used to indicate the location of referents of various kinds — the referent is typically a discrete object which is immobile, more or less horizontal in orientation, and on the ground. We term this kind of usage, which signals both location and orientation at the same time, ‘positional’. Some such usages look just the same as uses of English *lie*, as when one speaks a grindstone, knife, or spear *lying* on the ground. For example:

- (9) Muntawa! Tjiwa wiru panya nyangatja **ngari**-nyi! (P/Y)
 ah grindstone great that here lie-PRES
 ‘Ah! Here’s that excellent grindstone!’

There are also usages of *ngarinyi* ‘lie’ which do not correspond to anything in English, as in the examples below. The referents are, in order of occurrence: water, ‘meat’ (i.e. killed game such as kangaroo), money, and ‘tracks’ (*tjina* ‘feet, tracks’) on the ground. Though such examples seem at first glance to be positional, we suggest that they are better seen as a specialized type of existential construction —

as suggested by the translations. Notice that the subjects are in all cases indefinite/unspecified.

- (10) Mina (nyangatja) pulkanya ngari-nyi!
 water here big lie-PRES
 'There's a lot of water (here)!'

 (11) Ka kuka kutjupa ngari-nytja wiya. Ngalku-la wiya-ra-la
 CONTR meat other lie-NOML NEG eat-SER CONSUME-SER-1PL
 nyina-pai.
 sit-CHAR
 'But there wasn't any other meat (left). We'd eaten it all.'

 (12) Arkal-ku-na nyara unngu-tja. Nyangatja wiya, mani ngari-nytja
 try-FUT-1SG there inside-ASSOC here nothing money lie-NOML
 wiya.
 NEG
 'Let me just look in there. There's none here, there's no money (lying).'
 [a robber opening a safe]

 (13) Ngunytyu-ngku anku-la nya-ngu tjina ngari-nytja.
 mother-ERG go-SER see-PAST track lie-NOML
 'The mother went and found where the tracks were.'

In Arrernte, *inteme* 'lie' with inanimate referents has a positional meaning similar to that of its P/Y counterpart, i.e. depicting location in a horizontal position or shape that can be thought of as more like lying than sitting or standing. Examples include water (14), shadows (16), dust hanging in the air, and roots and burrows running horizontally underground. Unlike the P/Y *ngarinyi*, however, *inteme* 'lie' is used to describe the location of features of the sky, such as rainbows (15), clouds, and even the Milky Way (Henderson and Dobson 1994:384–5).

- (14) Kwatye arrule-arle lhere-le inte-ke apele ayaye akngerre.
 water long.time-REL creek-LOC lie-PC FACT slime big
 'Water that has been (lying) in the creek for a long time is slimy.'

 (15) Mpwelarre apele alkere-le inte-me, kwatye urnte-me-le iperre-nge.
 rainbow FACT sky-LOC lie-NPP water fall-NPP-SS after-ABL
 'The rainbow is in the sky after it rains.'

 (16) Ingwe-le apeke nhenge atnyentye-arle arrate-me akertne-irre-me-nge
 night-LOC if REMEMB moon-REL come.out above-INCH-NPP-DS
 ntulye irrkaye ware ahelhe-le inte-rlenge.
 shadow faint only ground-LOC lie-DS
 'When the moon rises at night, there are faint shadows on the ground.'

Examples like the last two can be open to an existential reading, as indicated in the gloss of (16). A subtle difference between positional and existential uses of *ngarinyi* and *inteme* ‘lie’ concerns their relationship to locational expressions, signalled grammatically by a spatial deitic or postpositional phrase. While the existential use of *ngarinyi* and *inteme* perhaps implies the existence of a particular location (a ‘locus’ of existence), this does not have to appear overtly. Positional uses, on the other hand, actually require an overt locational expression. (On a more general existential construction, see Section 4 below.)

The verb *ngarinyi* ‘lie’ has three further extended meanings related to sleep — the meaning ‘to sleep’ itself, the further extension to ‘to camp the night, camp with’, and a euphemism for having sex, as in the following examples. (The meaning ‘sleep’ can be rendered unambiguous by way of the fixed collocation *anku/kunkumpa ngarinyi* ‘lie asleep’.)

- (17) Pilangkita-ngka waltu-ra wanti, unytjun ngari-nytji-kitja.
blanket-LOC cover-SER leave(IMP) warm lie-NOML-INTENT
‘Cover (the child) with a blanket, so it can sleep warm.’
- (18) Munu-la ngari-ngu ngura panya Mimili-la munkara.
ADD-1PL lie-PAST place that place.name-LOC beyond
‘And we camped at that place beyond Mimili.’
- (19) Ka palumpa malpa-ngku anku-la palumpa kuri walytja-ngka
CONTR 3SG.GEN friend-ERG go-SER 3SG.GEN wife own-LOC
ngari-ra, pika panya ungku-ku.
lie-SER disease that give-FUT
‘And if her lover then goes and sleeps with his own wife, he can give (her) the same disease.’

The Arrernte *inteme* ‘lie’ is similarly linked with sleep, and can also serve as a euphemism for sex. The phrase *ankwe inteme* can be translated as ‘lying asleep’ or simply ‘sleeping’, a fixed collocation contrasting with *akarre aneme* ‘sitting awake’ or just ‘awake’ (as well as with *akarre inteme* ‘lying awake’ or *ankwe aneme* ‘asleep sitting up’).⁴ *Inteme* by itself can designate sleeping, similarly to (17) above:

- (20) Ampe akweke ankwe inte-ke.
child small asleep lie-PC
‘The baby lay asleep.’ or ‘The baby slept.’
- (21) Ampe nhakwe antyame-le inte-me.
child that bed-LOC lie-NPP
‘That child’s sleeping on the bed.’

Inteme can also refer to being born, usually accompanied by *akweke* ‘small, child’

or *arethape* ‘small baby (before crawling stage)’, similar to the fixed expression *iti ngarinyi* ‘be born’ in P/Y:

- (22) Ayenge Arltengke-le akweke **inte**-ke.
 1sS Arltunga-LOC small lie-PC
 ‘I was born at Arltunga.’

The womb is referred to as *akweke-inte-nhe* (small-lie-HAB), lit. ‘where the baby lies’.

3.2. ‘Sitting’

The most frequent meaning of *nyinanyi* ‘sit’ in P/Y texts is not the postural one, but a situational meaning something like ‘(of a person) to be in a place for some time, to stay’; Newman (this volume) observes that this is a common extension for ‘sit’ verbs. The time-frame may or may not be specified and it can be quite brief. As illustrated in (27), the reference point may be a person, i.e. one can speak of ‘staying with someone’.

- (23) Tjitji paluru kunyu ula-ra wangka-ngi, “Mama, Ngunytyju!
 child 3SG QUOT cry-SER say-P.IMPF father mother
 Yaaltji nyupali **nyina**-nyi?”
 where 2DU sit-PRES
 ‘The child was crying out, “Mum, Dad! Where are you?”’
- (24) Tjitji **nyina**. Puyi-ra-nta ilunta-nku.
 child sit(IMP) rain.fall-SER-2SG.ACC kill-FUT
 ‘Child stay (here). You’ll die of cold (if you go out in the rain).’
- (25) Kutju-na-tju nyaa-ku school-angka **nyina**-ma?
 alone-1SG-REFLEX what-PURP school-LOC sit-POT
 ‘Why should I stay in school all by myself?’
- (26) Ka Caroline-nga one week **nyina**-ngi Melbourne-ta.
 CONTR person.name-NOM one week sit-P.IMPF place.name-LOC
 ‘Caroline stayed in Melbourne for one week.’
- (27) Wiya, anku-la nyuntu-mpa kami-ngka **nyina**-ma.
 no go-SER 2SG-GEN grandmother-LOC sit-POT
 ‘No, you go and stay with your grandmother.’

The examples below show *nyinanyi* used in contexts where the time-frame is unspecified but is understood to be lengthy. In English, such usages are best translated as ‘live (in a place)’, cf. German *wohnen* ‘dwell, live in’ (as opposed to *leben* ‘live’), but we can see no evidence that these usages represent a distinct meaning separate from the one illustrated immediately above. The apparent dif-

ference in meaning (from an English perspective) can be sufficiently accounted for in terms of the different time-frames involved.

- (28) Munu-ya putji-ngka **nyina**-ngi pika wiya alatjitu pukulpa.
 ADD-3PL bush-LOC sit-P.IMPF sickness NEG at.all contented
 ‘They used to live in the bush without any illnesses, contented.’
- (29) Mungaṭu ngayulu Mimili-la **nyina**-ngi.
 some.time.ago 1SG place.name-LOC sit-P.IMPF
 ‘Some time back I used to live (=reside) in Mimili.’

In Arrernte, *aneme* ‘sit’ is used in the same ways. (In the following examples this use co-occurs with *aneme* in other uses, glossed here as ‘sit/be’ — auxiliary in (30) and existential in (31). These uses are discussed further in Sections 4 and 5 below.)

- (30) Ayenge ahentye-**ane**-tyakenhe dormitory-le **ane**-tyeke.
 1SGS want-sit/be-V.NEG dormitory-LOC sit-PURP
 ‘I didn’t want to stay at the dormitory.’
- (31) Lyetenyenge akwele altyerre-nge **ane**-ke arelhe ante
 in.the.beginning QUOT Dreaming-ABL sit/be-PC woman and
 anewe-ikwe ante ampe urreye. Itne **ane**-tyarte
 spouse-3KIN.POSS and child male 3PLS sit-REM.P.HAB
 apwerte itere-le lhere akngerre itwe-le.
 rock/hill side-LOC creek big near-LOC
 ‘In the beginning, in the Dreamtime, there was a woman, her husband
 and her son. They lived beside a hill near a big creek.’

Many traditional narratives open with this kind of orientation information, where *aneme* ‘sit’ establishes both the existence of the protagonists, and where they are living or located at the beginning of the events to be narrated.

A further use of P/Y *nyinanyi* ‘sit’ is distinguished by the fact that *nyinanyi* occurs with an “evaluative complement”, such as *palya* ‘good’ or *wirura* ‘well’. In this construction (see also 5.1 below), *nyinanyi* expresses a meaning something like ‘do things in certain way, behave’.

- (32) Ka ngunyju-gku wangka-ngu, “Untal, nyupali karu-ngka wirura
 CONTR mother-ERG say-PAST daughter 2DU creek-LOC well
nyina-ngi?” Ka untalpa-ngku wangka-ngu, “Wiya. Kuṭa-nya
 sit-P.IMPF CONTR daughter-ERG say-PAST no big.brother-NOM
 puṇu-ngka para-tati-ningi.”
 tree-LOC around-climb-P.IMPF
 ‘The mother asked, “Daughter, were you two behaving yourselves at the
 creek?” And the daughter answered, “No. Big brother was going around
 climbing trees.”’

- (33) Rawa mula_{tu}-ya alp_{iri}-ngku watja-_{ra} ninti-ningi, “Ara
 always truly-3PL giving.speech-ERG tell-SER instruct-P.IMPF way
 nyanga purunypa-ya nyina-ma.” . . . titutjara palya mulapa
 this like.3PL sit-POT always good truly
 nyina-nytja-ku, tjamu-nya kami-nya tjana-nya
 sit-NOML-PURP grandfather-NOM grandmother-NOM 3PL-NOM
 purunypa arka-_{ra} palya nyina-nytja-ku.
 like copy-SER good sit-NOML-PURP
 ‘They’d be continually giving (young people) instruction in morning
 speeches, “(You) should behave this way.” [They’d go on giving in-
 struction like this,] so they’d behave really well, behave well by emulat-
 ing their grandparents’ generation.’
- (34) Ngalku-la wiya-_{ra}-la nyina-pai. Tjinguru-la wati manyu
 eat-SER consume-SER-1PL sit-CHAR maybe-1PL man greedy
 nguwanpa nyara paluru nyina-ngi.
 somewhat that 3SG sit-P.IMPF
 ‘We used to eat it (i.e. a recently killed animal) all up. I guess we were
 behaving greedily then.’

When the meaning ‘do things in a certain way, behave’ occurs with an implied time-frame which is lengthy, it is easily rendered into English as ‘live’ — not in the sense of ‘reside’, but in the sense of carrying out the activities of daily life. For example, when introducing accounts of the old days, P/Y speakers often say that they will speak about *iriti nyina-nytja* [long.ago sit-NOML] ‘how we did things in the old days’.

Arrernte *aneme* ‘sit’ is also used in relation to daily activities or how people did things.

- (35) Kere arlke merne arlke arlkwe-me-le akwele itne ane-tyarte.
 meat too veg.food too eat-NPP-SS QUOT 3PLS sit-REM.P.HAB
 ‘They lived on bush tucker and meat.’
- (36) Kele alakenhe re kwele ane-ke altyerre-nge.
 so thus 3SGS QUOT sit-PC Dreaming-ABL
 ‘So this is the way things were in the Dreamtime.’

3.3. ‘Standing’

The following examples show some positional uses of *ngaranyi* ‘stand’. Notice that this meaning can be found in relation to humans, as well as to inanimate objects. That is, we claim that when one speaks in P/Y or Arrernte, as in English, of a person “standing” on their head, the verb is not being used in its

plain postural meaning but in an extended positional meaning.

- (37) Ngayuku kulaṭa pala-ngka ngara-nyi wiltja-ngka.
 1SG.GEN spear just.there-LOC stand-P.IMPF shade.shelter-LOC
 ‘My spears are there at the shade-shelter (i.e. leaning against it).’
- (38) Paluru kata-nguru ngara-nyi.
 3SG head-ABL stand-PRES
 ‘She’s standing on her head.’

In Arrernte, *tneme* ‘stand’ can indicate the position or the location of a referent that is in an upright or vertical orientation, whether or not it is in the posture of standing, in a strict sense. Note also that ‘kneeling’ is *ampere-le tne-me* [knee-LOC stand-NPP] and that “standing” on one’s head or hands is *akarlantye tne-me* [upside.down stand-NPP].⁵

- (39) Apere arrpenheme apwerte-le tne-me.
 river.gum some hill-LOC stand-NPP
 ‘Some river gum trees grow on hills.’
- (40) Apmwe akertne-irre-me-le tne-me.
 snake above-INCH-NPP-SS stand-NPP
 ‘Snakes rear up.’
- (41) Nanthe ingke-le irrertetye tne-me.
 horse foot/leg-LOC vertically.supported stand-NPP
 ‘The horse is standing up on its hind legs (i.e. rearing up).’
- (42) Lyekarre-arle ane-me akenhe alakenhe-arle alte-arle
 goosebumps-FOC sit/be-NPP but thus-REL hair-REL
 tne-rne-irre-me-arle, amulte-nge, ngkwerne-nge arlke.
 stand-REL-INCH-NPP-REL arm-ABL leg-ABL too
 ‘Goosebumps is when the hair stands up on your arms and legs.’

This latter example shows an intriguing contrast between the positional sense of *tneme* ‘stand’ and a copula use of *aneme*, again glossed as ‘sit/be’. The uses of these verbs without reference to specific position is the focus of the next two sections.

4. Existential and general locational meanings

The two languages diverge most in the ways in which posture verbs are used for a variety of functions that are independent of the specific posture or position of the referents. We referred briefly above to existential uses of P/Y *ngarinyi* and Arrernte *inteme* ‘lie’, but the ‘stand’ and ‘sit’ verbs in both languages have a much wider

range of uses. These include a general existential meaning ('there is/are'), a general locational meaning ('to be somewhere'), and copula-like functions. The distribution of these functions between the 'stand' and 'sit' verbs differs considerably between the two languages, as will be apparent from the description given here.

4.1. *Ngaranyi* 'stand, there is, be somewhere' in P/Y

The most theoretically interesting meanings of P/Y *ngaranyi* are the general existential meaning 'there is/are', and the general locational meaning 'to be somewhere'. We now describe these in turn. Despite the general preference for referring to salient positional orientation (e.g. speaking of water as 'lying' somewhere), *ngaranyi* can be predicated of any kind of entity, concrete or abstract, to simply assert (or, if negated, to deny) its existence — either in general or in relation to a specific place (the 'locus' of existence). The first set of examples shows this function in relation to concrete referents of various kinds.

- (43) Ka ngura itjunu-ngka. Punpunpa pulka **ngara**-ngi.
 CONTR place lush-LOC flies big stand-P.IMPF
 'It was a lush place. There were lots of flies.'
- (44) Pulɪ nyara katu nyawa. Walu ngara-nyi, ka tjukula
 hill over.there high see(IMP) rock.face stand-P.IMPF CONTR rockhole
ngara-nyi tjukutjuku.
 stand-PRES small
 'Look up at the top of that hill. There's a rock face, and there's a rockhole (there), a small one.'
- (45) Nyara palu-la kutjupa-kutjupa **ngara**-nyi, punu raunu-raunu
 over.there 3SG-LOC something-RDP stand-PRES stick round-RDP
 purunypa.
 like
 'There's something there, like a round stick.' [child seeing nosepeg of a camel for the first time]
- (46) Ka panya maɲa-ngka panya wipu wara **ngara**-nyi.
 CONTR that backside-LOC that tail long stand-PRES
 'And on its backside there was a long tail.'

The following examples show *ngaranyi* 'there is/are' with abstract subjects, such as event nouns and social states, such as 'trouble'. When the subject is a purposive clause, as in (49), *ngaranyi* can even be used to assert (or deny) someone's ability or right to do something; see Goddard (1986:84) for more detail on this specialized construction.

- (47) Mungaṭu Amata-la football carnival ngara-ngi.
 some.time.ago place.name-LOC football carnival stand-P.IMPF
 ‘A while back there was a football carnival at Amata.’
- (48) Ka tarapula pulka ngara-nyi.
 CONTR trouble big stand-PRES
 ‘There’ll be big trouble.’
- (49) Permit wiya, tjarpa-nytja-ku ngara-nytja wiya.
 permit NEG enter-NOML-PURP stand-NOML NEG
 ‘Without a permit, there’s no right to enter.’

The following set of examples shows the negative existential construction, which is formed simply by preposing the negative word *wiya* ‘not, no’ before the verb. Notice that (50) refers to water (even though, to assert the existence of water in a place, it is usual to use *ngarinyi* ‘lie’).

- (50) Munu-la anku-la kapi puṭu nya-ngu. Ka kapi wiya-tu
 ADD-1PL go-SER water cannot see-PAST CONTR water NEG-EMPH
 ngara-ngi.
 stand-P.IMPF
 ‘We went and tried to find water. But there was none at all.’
- (51) Road-angka-la kuka puṭu nyanga-ngi tinka
 road-LOC-1PL meat cannot see-PRES goanna
 wati-pitja-nytja-ku. Ka wiya ngara-ngi.
 across-come-NOML-PURP CONTR NEG stand-PRES
 ‘We look for goannas going past along the road. But there aren’t any.’

Notice that in all the existential examples above, the subject NPs are indefinite and/or unspecified. This is as one would expect of existential subjects. Indeed it has been regarded as a hallmark of a prototypical existential construction that it should be incompatible with definite subjects — or at least, that it should strongly favour indefinite subjects. This is on account of the so-called “thetic” quality of the existential predication (Sasse 1987). In a sense, in saying that something “is” (or isn’t), one is saying something about the state of the world. We mention this to draw attention to the fact that *ngaranyi* is also often found in what seems to be a general locational meaning, i.e. ‘to be somewhere’, and in these contexts the subjects are typically definite and/or specified.

Admittedly, the difference between a general locational meaning and an existential meaning is not necessarily always obvious (especially since existential predications can, and often do, contain a locational specification — a locus phrase). But consider the examples below, where the subject NPs are either pronouns or contain a demonstrative. The context of (52) is that some adults have

been searching for their teenage children, who have absconded from camp in the night. One of them spots the children around a campfire. The speaker is not asserting the existence of the children, nor asserting their existence in a particular location. Rather, it is a question of stating the location of a referent whose existence is already taken for granted. Example (53) is drawn from a text describing the hazards of venereal disease. ‘That sickness’ is, in this context, a taken-for-granted referent. In (54) the speaker is talking about a horse which she and the other children have been following.

- (52) Ka kutju-ngku pulkara wangka-pai, “Nyaratja-ya ngara-nyi
 CONTR one-ERG very.much say-CHAR there-3PL stand-PRES
 wagu-ngka!”
 fire-LOC
 ‘One of them shouted, “There they are, by the fire!”’
- (53) Minyma paluru ninti wiya, palu pika paluru unngu
 woman 3SG know NEG but.of.course sickness 3SG inside
 ngara-nyi.
 stand-PRES
 ‘The woman doesn’t know it, but that sickness is inside (her body).’
- (54) Ka paluru wiltja-ngka ngara-ngi, punu kurku-ngka.
 CONTR 3SG shade-LOC stand-P.IMPF tree mulga-LOC
 ‘It (a horse) was standing in the shade of a mulga tree.’

Similarly, consider the difference between a sentence with an indefinite subject, such as *Kulata wiya ngaranyi* ‘There are no spears (here)’, and parallel sentences in which the subject is specified by a demonstrative or possessive, e.g., *Kulata ngayuku wiya ngaranyi* ‘My spears aren’t (here)’, *Kulata panya wiya ngaranyi* ‘Those spears aren’t (here)’.

Given this pattern of complementary distribution (existential with indefinite subject, locational with definite subject), it may well be questioned, as many writers have before, whether it is legitimate to draw a sharp line between the two putative meanings. This question, however, is beyond the scope of the present study. We are content to stop simply at pointing out that *ngaranyi* ‘stand’ appears to express (in different constructions) both meanings, as conventionally recognized.

Presumably related to the existential construction is a further use of *ngaranyi* in an impersonal construction, corresponding to the English pattern: ‘It was — (then/there)’. Here the verb *ngaranyi* appears with a subject complement which may be a weather-state or season word, an evaluative adjective such as *wiru* ‘great, nice’, or a demonstrative expression such as *alatji* ‘like this’:

- (55) Kuḷi/wari pulka kunyu ngara-ngi.
summer/cold big QUOT stand-P.IMPF
'It was high summer/midwinter (at that time).'
- (56) Ka nyara palula ara-ngka wiru ngara-ngi.
CONTR over.there 3SG-LOC time-LOC great stand-P.IMPF
'It was great in those days.'
- (57) Alatji ngara-nyi!
like.this stand-PRES
'It's like this!'

4.2. *Aneme* 'sit, there is' in Arrernte

In Arrernte, it is the 'sit' verb, *aneme*, which has the most numerous and complex set of functions. In this section we describe its use in existential contexts analogous to the functions of the P/Y 'stand' verb described in the previous section.

Like *ngaranyi* 'stand' in P/Y, *aneme* 'sit' in Arrernte can be predicated of any entity, to indicate its existence, either in general or in relation to some specific locus of existence:

- (58) Mane apeke ane-me? Ingwenthe-ke ware apeke.
money maybe sit/be-NPP tomorrow-DAT only maybe
'Is there any money? Just until tomorrow.'
- (59) Atherrkenye ane-me alhwerrpe iperre.
green.time sit/be-NPP winter after
'The green season comes after winter.'
- (60) Picture wall-kerleke ane-me.
picture wall-CONNECT sit/be-NPP
'There's a picture on the wall.'
- (61) Kwatye althwente arne irlpelhe-le ane-me, kwatye urnte-ke-le-iperre.
water drop tree leaf-LOC sit/be-NPP water rain-PC-SS-after
'There's a raindrop on the leaf from the rain.'

Existence can be negated, with the negative verbal suffix *-tyakenhe* or *-tyange*:

- (62) Artwe-ante ane-tyange, relhe-rlke.
man-only sit/be-V.NEG woman-too
'There weren't only men, but women as well.'

- (63) Arne kwerrere **ane**-tyakenhe.
 tree soul sit/be-V.NEG
 'Trees don't have a soul.' (i.e. tree souls don't exist)

Tneme 'stand' and *inteme* 'lie' also have existential uses, but usually in contexts where the referent's orientation is compatible with the positional senses of these verbs:

- (64) Meyurle nhenhe re ulkere atningke Arltunga-le **tne**-me.
 donkey here 3sgS kind.of many Arltunga-LOC stand-NPP
 'There's lots of donkeys around Arltunga.'
- (65) Akaperte arlware **tne**-me.
 head lump stand-NPP
 'There's a lump on [his] head'.

Donkeys and other introduced animals such as cattle and horses are conventionally spoken of as *tneme*, probably because their habitual standing posture is noticeably different from that of native marsupials; and lumps can be thought of as extending upward from a surface. However, no such link with position is apparent in the idiomatic expression used to describe an empty or deserted place — *apmere ante tne-me* [place only stand-NPP], lit. 'there's only the place', i.e. nothing apart from the place itself.

It is possible that the existential meaning is also implicated in (66), where *tneme* 'stand' is predicated of a period of time which is described as "going past" the speaker.

- (66) Uterne anyente **tne**-me-le anpere-irre-nhe-ke.
 year one stand-NPP-SS past-INCH-DO.PAST-PC
 'A year went past.'

The associated motion suffix *-nhe*, indicating that the action of the verb is done while going past the speaker (Wilkins 1989:286–7), suggests that this use of *inteme* does not depend on some metaphor-like conceptualization of "time standing still".

It is true that the characteristic orientation or stance of entities is highly salient for Arrernte speakers, in accord with their general cultural and linguistic emphasis on spatial relations. As Wilkins (1989:439, 221) and others have noted, positional verbs help to distinguish among senses of other polysemous words, for example *ure* 'fire, firewood' is spoken of as *aneme* 'sitting' in the former sense and *inteme* 'lying' in the latter, and *arne* 'tree, stick' is spoken of as *tneme* 'standing' while still growing, and *inteme* 'lying' when lying on the ground. But *aneme* 'sit' can be applied to any of these or other entities regardless of position or orientation, as for example in the following locational construction where the referent is a tree:

- (67) Ilwempe apwerte ayerrer-thayate-le **ane**-me.
ghost.gum rock/hill north-side.of-LOC sit-NPP
'The ghost gum is on the north side of the hill.'

It would not be possible to substitute *tneme* 'stand' for *aneme* 'sit' in contexts like (58)–(63) above. The balance of evidence favours *aneme* 'sit' as the basic verb of existence and of general location in Arrernte.

5. Copula and auxiliary functions

5.1. Copula-like functions of P/Y *nyinanyi* 'sit' and *ngaranyi* 'stand'

We first describe a copula-like function of P/Y *nyinanyi*, as exemplified in the set of sentences below. Here *nyinanyi* occurs with an "attributive complement", such as an adjective, stage-of-life word, or occupation term. It is tempting to say that in this function *nyinanyi* has little or no lexical meaning but this would not be advisable, if only because *ngaranyi* 'stand' also has copula functions, as we will see in a moment, of a different nature. A semantic characterization can help to pinpoint the differences in copula-like usage between the two verbs. The key thing about *nyinanyi* in these uses is the idea of co-terminous activity sustained over time. For example, in (68) when the brothers speak about *pukulpa nyina-nyi* [happy sit-PRES] and *palya nyina-nyi* [good sit-PRES], what they are speaking about is the younger brother's good mood while he is playing. In (69), *ipilya nyinangi* does not refer simply to being in a fit and healthy state, but rather to living in such a way as to be healthy. In (70), the reference to *tjitji pulka-pulka nyinangi* does not refer solely to being a youngster, but to acting as a youngster does.

- (68) Ka kuṯa-ngku piṛuku wangka-ngu, "Nyuntu pukulpa
CONTR older.brother-ERG again say-PAST 2SG happy
nyina-nyi?" Ka maḷanypa-ngku wangka-ngu, "Uwa, palya-ṇa
sit-PRES CONTR younger.sibling-ERG say-PAST yes good-1SG
nyina-nyi."
good-1SG sit-PRES
'The older brother asked again, "Are you happy?" And the kid brother
answered, "Yes, I'm fine."'
- (69) Ka aṇangu uwankara ipilya **nyina-ngi**.
CONTR people all fit sit-P.IMPF
'Everyone was fit (in those days).'
- (70) Ngayulu tjinguru tjitji pulka-pulka **nyina-ngi**.
1SG maybe child big-RDP sit-P.IMPF
'I guess I was a youngster (at that time).'

The copula-like function under discussion bears a resemblance, in two respects, to the meaning ‘behave, do things in a certain way’ which was described earlier in Section 3. There is a syntactic similarity — both uses have *nyinanyi* occurring with a predicative complement, and there is a semantic similarity — both meanings involve activity. Given this similarity, it might be doubted whether they are indeed distinct at all. Decisive examples are provided by expressions which are ambiguous. For example, *palya nyinanyi* [good sit] can mean either ‘to behave properly’, as in (33), or ‘to be fine (while doing something)’, as in (68). Similarly, the expression *wirura nyinanyi* [well sit] can mean either ‘to behave well’, as in (32), or ‘to be comfortable, as when things are “going well”’. Taken out of context, these expressions are ambiguous between the two possible meanings.

On account of its “active” dimension, just described, *nyinanyi* in this function is best described as “copula-like” rather than a true copula. The verb *ngaranyi* ‘stand’, on the other hand, does deserve to be described as a true copula. Generally speaking, this usage is found in tenses other than the present tense. This is because unless a tense specification is required, simple juxtaposition is sufficient to convey attributive modification. Structurally the construction is distinct from anything we have seen so far with the verb *ngaranyi*, inasmuch as the verb appears with an attributive complement (usually pre-verbal), which modifies the subject NP. The semantic effect is to identify a transient state or condition. The following examples show a range of subject types (persons, places, things) and attribute types (physical and mental conditions):

- (71) Nyuntu hospital-angka rawa nyina-ra-mpa, palya alatjitu **ngara**-ma.
 2SG hospital-LOC long.time sit-SER-interest good really stand-POT
 ‘If you’d stayed longer in hospital, you’d have been perfectly all right
 (i.e. you’d have recovered fully).’
- (72) Munu-**na** **kanany-kanany** **ngara**-ngi, kuula-kutu
 ADD-1SG pleased.with.self-RPD stand-P.IMPF school-ALL
 anku-nytji-kitja.
 GO-NOML-INTENT
 ‘I was pleased with myself, being ready (i.e. old enough) for school.’
- (73) Palu ngayulu palya kuli-ntja wiya. Panya ngayuku
 but.of.course 1SG good think-NOML NEG you.know 1SG.GEN
 kata kura mulapa **ngara**-ngi.
 head bad truly stand-P.IMPF
 ‘I didn’t pay proper attention. My head was really aching (lit. bad).’
- (74) Tjintu ma-tjarpa-nytja-la, ilkari milkali purunypa **ngara**-ngi.
 sun away-enter-NOML-LOC sky blood like stand-P.IMPF
 ‘As the sun set, the sky was like blood.’

- (75) Tuwa ala ngara-ngi.
door open stand-P.IMPF
'The door was open.'
- (76) Palu ukiri panya kapi-ngku puyi-ntja wiruly-wirulypa
but.of.course grass that rain-ERG rain.fall-NOML slippery-RDP
ngara-ngi.
stand-P.IMPF
'Now that there's been rain the grass is slippery.'

Though present-tense examples are not as common, they certainly do occur, as in the examples below. The effect of including *ngaranyi* is to highlight the transient nature of the phenomenon.

- (77) Ngayuku tjitji tjuṭa tjituru-tjituru ngara-nyi.
1SG.GEN child PL sad-RDP stand-PRES
'My children are all sad.'
- (78) Muntawa. Palya-tu ngara-nyi, walka winki.
oh.yes good-EMPH stand-PRES pattern complete
'Oh yes. It's still all right, with the pattern intact.' [discussing a pattern drawn on his wife's back, which would have been disturbed if she had had sex with another man.]

It may well be asked: Does *ngaranyi* in this copula use have a specifiable lexical meaning? In a sense, no — but with the important qualification that the very presence of the time-specification conveys a different semantic effect than that conveyed by simple juxtaposition. This is why a sentence like *Wati nyangatja pulka* 'this man is big' is unremarkable, whereas ?*Wati nyangatja pulka ngaranyi* sounds odd, implying that at other times the man may be different in size. An interesting example in this connection is (79). It was the opening question in a TV interview being conducted in P/Y. The unusual collocation of *pulka ngaranyi* [big stand-P.IMPF] makes sense in this context because the interviewer is opening up the possibility that in days gone by Ernabella could have been much smaller than it is today.

- (79) Ka Ernabella-nya ngura pulka ngara-ngi iriti?
CONTR place.name-NOM place big stand-P.IMPF long.ago
'So, was Ernabella a big place in the old days?'

5.2. Copula and auxiliary function of Arrernte *aneme* 'sit/be'

In Arrernte, the verb *aneme* 'sit' serves an important grammatical role by providing a range of copula and auxiliary functions — comparable in many respects to

those served by the English verb 'to be'. In examples such as the following, for example, the referents are not seated, nor even staying in one place. Rather, *aneme* is functioning primarily as a carrier of tense, as in (80) and (81), or negation, as in (82); see also Wilkins (1989:220–1), Henderson and Dobson (1994:127).

- (80) Re angayakwe anteme **ane-ke**.
 3SG hungry now sit/be-PC
 'She was hungry then.'
- (81) Arrpenhe athetheke anthurre-arle **ane-ke**, arrpenhe athetheke-thetheke
 other red very-FOC sit/be-PC other red-RDP
ane-ke.
 sit/be-PC
 'Some [flowers] were really red and others were just pink.'
- (82) Arrwekele-le akwete unte-ke, apurrke **ane-tyakenhe**.
 front-LOC still run-PC tired sit/be-V.NEG
 'She kept running ahead, not being tired.'

To be more precise, simple attribution does not require *aneme* 'sit', because (as in P/Y) it is possible to form an attributive construction by simple juxtaposition; for instance, *re angayakwe* [3SG hungry]; *re apurrke* [3SG tired]. When *aneme* 'sit/be' is used, however, the effect is to highlight the time-bound nature of the condition being described. In this respect there is a subtle difference between *re artwe ampwe anteme* [3SG man old now] and *re artwe ampwe anteme ane-me* [3SG man old now sit/be-NPP], though both would translate into English as 'He is an old man now'. In a grammatical sense, however, it can be said that *aneme* is optional in such contexts.

The same is not true, however, once negation enters the picture, because attributive negation (i.e. the denial of attribution) requires the presence of a verbal element to host the negator *-tyakenhe* [V.NEG]. To make both negation and past time reference explicit, as in (83), two instances of *aneme* may occur. As observed by Wilkins (1989:236), purposive-marked verbs are similarly dependent upon an auxiliary to carry tense, as in (84); and the same applies to complex nominal modifiers such as the relative-like structure in (85). In such usages, it seems reasonable to refer to *aneme* as an auxiliary verb.

- (83) Re apurrke **ane-tyakenhe ane-ke**.
 3SG tired sit/be-V.NEG sit/be-PC
 'She was not tired.'
- (84) Re alhe-tyeke **ane-rne**.
 3SG go-PURP sit/be-P.IMM
 'She was just about to go.'

- (85) Arlenge-le akenhe akwele **ane-ke** kwatye iperte re,
 far-LOC but QUOT sit/be-PC water hole 3SG
 itne-arle kwatye-arle antywe-me-le **ane-tyerte**.
 3SPLS-REL water-REL drink-NPP-SS sit/be-REM.P.HAB
 'But the waterhole was quite a long way away, where they used to get
 their drinking water.'

Though *tneme* 'stand' and *inteme* 'lie' also have some limited copula-like functions, *aneme* is by far the most general and frequently occurring verb in copula functions. Furthermore, as Wilkins (1989:439) suggests, *aneme* can readily replace other verbs in copula function, but the reverse would not be possible in many instances.

Presumably related to its copula function, *aneme* appears in combination to form various other verbs, like *artepe-aneme* 'bending over, crouching, stooping', *arrape-aneme* 'waiting in ambush', *teke-aneme* 'warming itself in the sun' (of lizards and snakes, which would usually be described as *inteme* 'lying'), *ampeke-aneme* 'attached to or resting against something', *kerre-aneme* 'staying in a group, bunched together', *atangke-aneme* 'squatting down', *ake-aneme* 'with top part showing', *urleme-aneme* 'sticking out from behind or inside something', *arlpape-aneme* 'hanging down from something'. All of these have to do with position or location, but *aneme* does not contribute any specific postural meaning — though it may perhaps indicate that the referent is in a position with relation to something else.⁶

Another related use is with the word *ahentye* 'want', a nominal which, like the states of *angayakwe* 'hungry' and *apurrke* 'tired' seen above, is dependent upon a verbal element to carry tense or negation. This can be either *ane-* 'sit/be' or *irre-* 'inchoative', neither of which contributes much semantic information. Speakers regard the three versions of the following utterance as identical in meaning:⁷

- (86) Ayenge ahentye apmere-verne alpe-tyeke.
 Ayenge ahentye-**ane**-me apmere-verne alpe-tyeke.
 Ayenge ahentye-**irre**-me apmere-verne alpe-tyeke.
 1SG want home-ALL return-PURP
 'I want to go home.'

6. More grammaticalized functions

In addition to their grammatical roles serving copula and auxiliary functions, as just described, the 'sit' and 'stand' verbs have additional grammaticalized functions in both languages.

In P/Y *nyinanyi* 'sit' and *ngaranyi* 'stand' have quasi-aspectual grammaticalized functions. The first construction fits into a periphrastic pattern in which a finite verb acts as an auxiliary, providing aspect-like modification for a main verb

which appears in the dependent, serial form. The two examples below illustrate this pattern not with *nyinanyi*, but with another verb *waniyi* ‘throw’, which creates a “distributive” construction depicting spatial dispersion. Notice that the case-marking of the subject is determined not by the auxiliary (*waniyi* ‘throw’ is ostensibly transitive) but by the serial verb, thereby testifying to its status, in this construction, as main verb.

- (87) a. Wati tjuṭa nyina-ra wani-nyi.
 man PL sit-SER throw-PRES
 ‘The men were sitting scattered around.’
 b. Wati tjuṭa-ngku kuka ngalku-la wani-nyi.
 man PL-ERG meat eat-SER throw-PRES
 ‘The men were scattered around eating meat.’

When *nyinanyi* ‘sit’ is found in a similar auxiliary-like role, it indicates that the action depicted by the serial verb (with attendant arguments, etc.) is done generally, customarily, or as a “way of life”. According to Newman (this volume), it is common for ‘sit’ verbs to develop the function of marking “habitual” aspect.

- (88) Kungka nyuntu nyaa-ku kati-ra nyina-nyi?
 wife 2SG what-PURP take-SER sit-PRES
 ‘Why do you take your wife with you (on trips)?’
 (89) Yaaltjingara-la yungku-la nyina-nyi?
 how-1PL give-SER sit-PRES
 ‘How are we going to distribute it (money)?’

Interestingly, *ngaranyi* ‘stand’ achieves an apparently similar semantic effect by the converse grammatical means: the verb appears in its serial form — *ngarala* — as an adverbial modifier indicating that an action, process or activity was carried on for a long period. It is typically found in sentences condemning someone’s misbehavior. For example:

- (90) Maḷany-tja manti ngara-la pirtji-nyi.
 younger.sibling-LOC most.likely stand-SER fiddle-PRES
 ‘Most likely (he’s) been playing around with my sister.’
 (91) Kungka-ngku munu nyitayira-ngku kulu ngara-la pantil-pai pitulu.
 girl-ERG ADD boy-ERG also stand-SER sniff-CHAR petrol
 ‘Girls and boys both go in for sniffing petrol.’
 (92) Alatjitu wiyari-wa. Nyaa-ku-n titutjara ngara-la
 really stop.it-IMP what-PURP-2SG always stand-SER
 ngalytjurmana-nyi?
 complain-PRES
 ‘Knock it off. Why do you keep on and on with your complaining?’

We have already seen the extensive grammatical function of Arrernte *aneme* 'sit/be' as an auxiliary, hosting negation and tense marking in attributive and other constructions. An even more fully grammaticalized use of the form *ane-* is seen in the verbal suffixes for continuous actions or events, *-rle-aneme* and *-rlte-aneme*, as in the forms *anerle-aneme* 'sitting around', *tnerle-aneme* 'standing around', *interle-aneme* 'lying around'. The first element of the complex, *-rle-*, is probably related to the 'generic event' or 'omni-temporal' verbal suffix described by Wilkins (1989: 231–2). The form *-rlte-aneme* (also *-lte-aneme*, *-rlteneme*) indicates continuity and plural subject agreement, while *-rle-aneme* (also *-le-aneme*, *-rleneme*) indicates continuity but carries no information about the number of the subject (Wilkins 1989: 252–4). Some examples:

- (93) Kwatye ilpenthe-le ingwartetye-le anhe-**le.aneme**-iperre
 water steady.rain all.night-LOC be.raining-CONT-after
 ahelhe atyete anthurre irre-me.
 ground soft very INCH-NPP
 'When it rains steadily all night, the ground is very soft in the morning.'
- (94) Kenhe mape kenhe kele ingkerreke
 but group on.the.other.hand then all
 alhe-**rlt.anem**-iwe-rlenge . . .
 go-CONT.PLS/A-leave.behind-DS
 'All the others were shifting to another place . . .'
- (95) Kele rlkerte-rlkerte-**ane**-me irre-me-le, rlkerte-rlkerte
 then sick-RDP-be-NPP-SS INCH-NPP-SS sick-RDP
 unthe-**rl.ane**-me-le . . .
 go.around-CONT-NPP-SS
 'She got sicker and sicker. . .'

These forms indicate that the verb event is continuous without any reference to motion, in contrast with *-rle.peme* and *-rlte.peme*, which indicate that the verb event continues while the subject is in motion (Wilkins 1989: 253; Henderson and Dobson 1994: 533–4). The role of the element *ane-* here is thus also semantically compatible with the notion of the subject remaining in a particular condition (analogous to remaining in a place), in contrast with the *-pe-* element (from an archaic form 'to go') indicating that the subject is moving.

7. Concluding remarks

Our purpose in this chapter has been to provide a comparative overview of the lexical and grammatical meanings and functions of the posture verb sets of two

languages. Even though the level of semantic description has been fairly informal, we believe we have shown that each of the verbs considered has a number of clearly separable, albeit inter-related, meanings. The more polysemic items, i.e. the 'sit' and 'stand' verbs in both languages, each have upwards of half-a-dozen separate meanings or functions. Many of these have analogues in other languages (see Newman, and other chapters in this volume). Despite the many apparent isomorphisms between the two languages, it has emerged that there are also significant differences. In particular, some of the most general or schematic meanings — the existential ('there is . . .') and general locational ('be somewhere') meanings, and the copula function — are borne by different verbs in the two languages: *ngaranyi* 'stand' in P/Y, *aneme* 'sit' in Arrernte.

Though we have occasionally drawn attention to possible semantic "bridges" between polysemic meanings, in the form of shared semantic components or affiliations in event-structure, we have not attempted to delineate the structure of the polysemic networks in any detail. We would, however, like to make the general point that any explanation of the polysemic network is dependent on the model of semantic analysis one adopts, and more specifically on the fine details of semantic analysis of individual verb senses. For example, if the postural meanings of 'sit', 'stand', and 'lie' were to be explicated solely in terms of the positions and orientation of body-parts, there would be little opportunity to link the postural meanings with other meanings expressible by the same verbs. On the other hand, if the semantics of the postural senses also includes reference to the prototypical behaviors or potential behaviors associated with each posture (see Newman, this volume), this opens up a much richer range of possibilities for identifying semantic links with other meanings. For example, if the semantics of 'sitting' includes reference to the fact that a person in this posture can comfortably 'do many things', then a possible link becomes apparent with the meaning of P/Y *nyinanyi* 'to behave, do things in a certain way'. To explore these issues adequately would call for a much larger study.

A final general issue which we would like to mention concerns the identification of possible universals of lexicalized meaning, an issue with profound implications for the methodology of cross-linguistic semantics, quite aside from its considerable inherent interest (cf. Wierzbicka 1996, Goddard 2001). In the absence of careful semantic description, it could easily be concluded, for example, that P/Y and Arrernte lack any lexical units with the general existential meaning, or with a general locational meaning. Such a conclusion, we hope to have shown, would be premature and mistaken. From the information in Newman (this volume), and other chapters in this volume (cf. Goddard 1996b), it appears that when such meanings are apparently "missing" in a language, they very often can be found as discrete meanings expressed by posture verbs.

Abbreviations

1, 2, 3=first, second, third person; 1KIN.POSS=first-person kin-possessor; A=transitive subject; ABL=ablative; ABS=absolutive; ADD=additive conjunction; ALL=allative; ASSOC=associative; CHAR=characteristic mood; CONT=continuous; CONTR=contrastive conjunction; DAT=dative; DO.PAST=concurrent associated-motion marker; DS=different subject; DU=dual; EMPH=emphatic; ERG=ergative; FACT=factive; FOC=focal constituent; FUT=future; GEN=genitive; HAB=habitual; IMP=imperative; INCH=inchoative; INTENT=intentional; LOC=locative; NEG.IMP=negative imperative; NOML=nominalization; NPP=non-past progressive; PAST=past tense; PC=past completive; PER=permissive; P.IMPF=past imperfective; PL=plural; POSS=possessive; POT=potential mood; PRES=present tense; PURP=purposive; Q=question; QUOT=quotative; RDP=reduplication; REFLEX=reflexive; REL=relative clause marker; REM.P.HAB=remote-past habitual; S=intransitive subject; SCOMP=subject complement; SER=serial verb marker; SG=singular; SS=same subject; V.NEG=verb negator. Note that we have elected not to include interlinear glossing of zero-marked case forms.

Notes

1. P/Y is an abbreviation often used in the traditional areas, e.g. in the names of organizations such as P/Y Media and P/Y Air.
2. Example sentences in this chapter are drawn from these sources and from text materials held by the authors. We would like to state clearly, however, that the analysis presented here is not necessarily the same as that implicit in the dictionaries and other sources. Any errors or misinterpretations are our own.
3. In Arrernte, the verb *artepe-aneme* 'bend over, crouch, stoop' is derived from *artepe* 'back' plus *aneme* 'sit'. However, *artepe-aneme* refers not only to sitting hunched up, but also to bending over from a standing position, stooping, or crouching. The common element among these meanings is the rounded shape of the back. This is one of many examples of *aneme* in contexts where it does not refer exclusively to a seated posture or to resting upon the buttocks.
4. Related expressions are: *akarre iwelhe-me*, lit. 'awake lie.down-NPP' meaning 'lying awake or only half asleep', and *irrkawe inteme* 'lying unable to sleep' — a possible omen that relatives are coming the next day.
5. *Akarlantye* occurs in other combinations having to do with an upside-down position, such as *akarlantye iwelheme* 'tumble, do a somersault', though we have no examples of it on its own.
6. Another interesting formation is the nominal *arrpe-anenhe* 'each, every (one); lots of different (ones)', derived from *arrpe* 'other' and *ane-nhe* 'sit/be-HAB'. Wilkins (1989:265–8) describes other sets of verbs formed with the following verb stems in various combinations: *iwe-* 'to throw away', *are-* 'to see', *ake-* 'to cut', *angke-* 'to speak', and *ine-* 'to get'.

7. It does not necessarily follow that *aneme* or *irreme* here should be regarded as completely semantically empty or 'bleached'. The time-bound character of *aneme* is compatible with the lexeme that it accompanies (*ahentye* 'want'), and so is the process-like nature of *irreme* 'becoming, happening' (which also occurs with other experiential states, particularly emotions like *ahele-irreme* '(getting) angry', *apure-irreme* '(getting) shame'). Thus, it can be argued (as in Harkins 1995:51, 221) that *aneme* or *irreme* in these formations retain some semantic content, even though they do not contribute any new or additional semantic information over and above that already present in the clause.

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CHAPTER 10

Sit right down the back

Serialized posture verbs in Ngan'gityemerri and other Northern Australian languages

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1. Introduction

Cross-linguistically the development of continuous aspect marking from posture verbs is well attested. The extension of posture or stance verbs ('sit', 'stand', 'lie') to markers of progressive or continuous aspect has been documented in a wide literature. Heine, Claudi, and Hünemeyer (1993) and Heine and Reh (1984), for example, note this type of grammaticalization for African languages. Bybee, Perkins, and Pagliuca (1994) note the frequency of progressive forms that derive from locative elements, and also observe that 'sit' can serve as a grammaticalization source for habituais.

In many parts of Australia there are languages in which there are constructions involving stance verbs working with another verb, in what appear to be single predicate constructions. Semantically the contribution to the predicate of these stance verbs is more of an aspectual nature than a lexical one. In other words these stance verbs are, at least to some extent, bleached of posture/stance meanings, and typically convey 'continuous', or 'progressive' aspect.

Constructions of these types are reasonably common in Australia's Pama-Nyungan languages. Consider this example from Goddard's description of Yankunytjatjara, where he describes a customary serialization construction involving the verb 'sit' as "a finite verb providing aspect-like modification for a verb in serial form" (Goddard 1985):

- (1) Yankunytjatjara (Goddard 1985)
Wati-ngku kali atu-ra nyina-nyi.
man-ERG boomerang.ACC chop-SERIAL sit-PRES
'The man makes boomerangs.'

Similar construction types have also been discussed in some detail in Austin

(1998) specifically with respect to Mantharta, but he additionally draws on data from other Australian languages. The Mantharta example below, in which the main verb ‘chase’ is semantically incompatible with the lexical sense of ‘sit’, demonstrates this semantic bleaching:

- (2) Mantharta (Austin 1998)
 . . . pularntura-nyjarri-yi yanga-rnu kumpa-yi.
 type of lizard-PL-DAT chase-IMPERF.SS sit-PURP.SS
 ‘. . . and (Crow) chased pularntura lizards.’

There are languages in the north of Australia where complex verbs are constructed of a lexical coverb root, and matched with an auxiliary-like finite verb. As an example consider this verb from Ngan’gityemerri from Reid (1990):

- (3) Nganni-batybity-tye.
 1PLEXS.poke.PI-sew-PAST
 ‘We were sewing.’

Such complex verbs constitute a single predicate. In this example the element glossed ‘poke’ is one of 31 finite verbs that combine with coverbs, and indicates activities carried out by piercing things with a long thin instrument (in this case a needle).

Of the set of 31 finite verbs, 6 are the intransitive posture/motion verbs ‘sit’, ‘stand’, ‘lie’, ‘perch’, ‘go’, and ‘travel’. (4) contains ‘sit’ as a finite verb:

- (4) Nginni-fifi-tye.
 1PLEXS.sit.PI-smoke-PAST
 ‘We were smoking.’

Recently some of these languages have developed serialized posture verbs at the right hand edge of the complex verb, as in example (5). Note that (5) involves the same finite verb + coverb as (3), with the addition of the finite verb of (4) serialized to it:

- (5) Nganni-batybity-tye-nginni.
 1PLEXS.poke.PI-sew-PAST-1PLEX.sit.PI
 ‘We were sewing.’

Despite the presence of two finite verbs within the complex construction exemplified in (5), there is overwhelming evidence that this construction type is best analyzed as a single predicate. Here the serialized posture verb is formally an enclitic and marks continuous, non-punctual aspect, or habitual aspect. A serialized verb functioning as an enclitic remains fully finite and must show concord with the main finite verb with regard to tense/aspect/mood inflection, and subject person and number marking. This construction type is found as an

areal phenomenon amongst the western and southern Daly languages, and is reported in the major grammars of Emmi (Ford 1998) and Marrithiyel (Green 1989) and Ngan'gityemerri (Reid 1990), though with some minor variations between languages that will be discussed later.

In this chapter, §2 presents evidence of the two basic construction types (simple and complex) in which Ngan'gityemerri posture finite verbs play a major role. §3 then examines the functions and semantic roles of simple posture verbs, while §4 deals with the functions and semantic roles of complex posture verbs. §5 describes the construction type illustrated in (5) in which a posture stance verb is serialized to a verb that is already complex. §5 firstly examines this construction in Ngan'gityemerri, compares it with some Western Daly languages, and presents evidence suggestive of varied levels of grammaticalization of this construction within the Daly languages. It then further speculates about whether such grammaticalization patterns demonstrate direction in diffusion. Finally, §5 compares the Daly-type serialized posture verb with a similar construction in the Maningridan languages and Djapu.

2. Simple and complex verb types

There are two types of verb in Ngan'gityemerri: simple and complex. These are defined with respect to the constituent units *finite verb* and *coverb*. The presence of a *finite verb* is a factor common to both verb types, though simple verbs consist minimally of just a *finite verb* and are characterized by the absence of a *coverb*.

The ten finite verbs that form simple verbs are likewise referred to as 'simple finite verbs'. The finite verb 'sit', forming a simple verb, is demonstrated in (6):

- (6) Ngirim.
1SG.S.sit.PR
'I'm sitting.'

The other 21 finite verbs can only form verbs in combination with a verb stem. These finite verbs are labelled 'complex finite verbs' and the verbs they form are likewise known as complex verbs. The complex finite verb 'hands', in combination with the verb stem *-wurity* 'make/fix', forming a verb meaning 'to make/fix something with one's hands', is demonstrated in (7):

- (7) Ngerim-wurity.
1SG.S.hands.PR-make
'I'm making it.'

The 21 'complex finite verbs' cannot form simple verbs. Thus (8), an attempt to form a simple verb consisting minimally of the 'hands' finite verb, is nonsensical.

- (8) *Ngerim.
1SG.S.hands.PR

However the 10 simple finite verbs can, in addition to their role in forming simple verbs, also form complex verbs. Compare the use of the simple finite verb ‘sit’ in (9) where it forms a complex verb, with (6) above where it forms a simple verb:

- (9) Ngirim-tyerrakul.
1GS.sit.PR-talk
‘I’m talking.’

Other than the 10 simple verbs then, all Ngan’gityemerri verbs are of the complex type, consisting of the two major units: the finite verb and the coverb. The complex verb constitutes a single phonological word and is typically ordered with the coverb following the finite verb.¹

The meaning of any complex verb results from the combination of these two verbal units. The meanings of the 31 Ngan’gityemerri finite verbs are listed in Table 1.

Table 1. Ngan’gityemerri’s 31 finite verbs

	Intransitive	Transitive	Detransitive/ reflexive
Simple	sit	take	
	lie	see	see oneself
	stand	say/do	say/do oneself
	perch		
	go		
	travel		
Complex	arrive		
		hands	hands oneself
		feet	feet oneself
		mouth	mouth oneself
		poke	poke oneself
		bash	bash oneself
		shove	shove oneself (dynamic)
			shove oneself (stative)
		heat	heat oneself
		slash	
		pull	
		snatch	
		suck	

3. Posture verbs in simple verb constructions

There are six finite verbs that can function as simple intransitive verbs: 'sit', 'lie', 'stand', 'perch', 'go', and 'travel'. Functioning as simple verbs, the postural 'sit', 'lie', 'stand', 'perch' are stative, having inherently imperfective aspect. That is, any activity described with one of these stative finite verbs must be viewed as having internal temporal constituency. As a consequence of this, the postural finite verbs cannot, in their simple function, be inflected for the tense/aspect/mood (TAM) category that I have labelled 'perfective'. Inflection for this category entails the viewing of an event as strictly punctual, an interpretation that is incompatible with the imperfectivity inherent in the stative finite verbs. Thus in (10)–(13) below, 'sit' can be inflected for the categories 'present', 'irrealis', and 'past imperfective'. However the attempt in (13) to inflect inherently imperfective 'sit' for the 'perfective' category is unacceptable.

- (10) Ngirim.
1SG.S.sit.PR
'I am sitting.'
- (11) Ngi-pe.
1SG.S.sit.IR-FUT
'I'll be sitting.'
- (12) Ngini-tye
1SG.S.sit.PI-PAST
'I was sitting.'
- (13) *Ngiriny.
1SG.S.sit.PF

This constraint on the inflectional possibilities for simple posture verbs provides nice formal evidence of the inherent aspectual characteristics that Newman (this volume) attributes to posture verbs. Not only must the situation described by an 'intransitive' simple verb be understood aspectually to continue for a period of time, but the particular posture marked by the finite verb must also be understood to remain unchanged throughout this period. Stative verbs then cannot be used to mark motion or change-of-posture. The dynamic correspondences of the stative postural verbs are formulated with dynamic 'go' (discussed below). Compare the simple stative 'sit' verb in (14) with the dynamic complex verb employing 'go' in (15).

- (14) Kinyi ngi-pe.
 here 1SG.S.sit.IR-FUT
 'I'll sit here (and be sitting here).'
- (15) Kinyi ngani-wap-pe.
 here 1SG.S.go.IR-sit.down-FUT
 'I'll sit down here.'

The motional finite verbs 'go' and 'travel', forming the second group, are dynamic and may be used to describe activities with either imperfective or punctual aspect. Consequently 'go' and 'travel' can avail themselves of all four Ngan'gityemerri finite verb inflectional categories. This is demonstrated for 'go' in (16)–(19).

- (16) Ngaganim.
 1SG.S.go.PR
 'I'm going.'
- (17) Ngani-pe.
 1SG.S.go.IR-FUT
 'I'll go/be going.'
- (18) Ngagadi-tye.
 1SG.S.go.PI-PAST
 'I was going along.'
- (19) Ngaganiny.
 1SG.S.go.PF
 'I went.'

As dynamic verbs 'go' and 'travel' describe actions that 'happen' rather than states that 'exist'. Most simply, they function as verbs of motion, unspecified for direction. 'Go' is the more general motion verb, with 'travel' describing more purpose/destination-oriented motion and continued motion.

- (20) Mumba nayin-nime wadeninggi-nyine ngangginim-nime?
 walk 1DLINC.S-PL tomorrow-FOC 1PLINC.S.go.PR-PLS
 'So we're off on a trip tomorrow then, are we?'
- (21) Amungal-nimbi yirrini-tye fepi minbadi.
 Batchelor-SRCE 3SG.S.travel.PI-PAST hill big
 'From Batchelor he travelled to Peppimenarti.'

Where the stative verbs 'sit', 'lie', and 'stand', are restricted to describing single durations of unchanged posture, the dynamic verbs 'go' and 'travel' can refer to repeated activity. This iterative aspectual interpretation is consistent with the notion of 'moving from place to place'. Compare stative 'sit' in (22) with dynamic, iterative 'go' in (23):

- (22) Dede Pindiying nginni-tye.
country P. 1PLEX.S.sit.PI-PAST
'We were camped at Pindiying.'
- (23) Dede marrgumarrgu nganggidi-tye.
country new.DUP 1PL.S.go.PI-PAST
'We'd move about to new places.'

Extending from this notion of renewed or repeated motion, 'go' and 'travel' come to be associated with habitual activity:

- (24) Kidin yeyi nganggidi-pagu-tye de-kinyi.
year other 1PLINC.S.go.PI-HITH-PAST country-this
'We used to come to this place every year.'

Both the stative and dynamic simple verbs perform three main functions. In addition to a 'literal' function, they have two copula-like functions: 'existential' and 'ascriptive'.

The literal function of 'sit', 'lie', 'stand', 'perch', 'go', and 'travel' is to mark the particular posture/motion of the subject of the verb. The literal usage of these verbs is essentially restricted to reference to higher animates, particularly humans, for it is only with these subjects that the capacity to contrast posture/motion has any real discourse significance. 'Sit', then, is only used literally to describe the posture of the kind of higher animates having legs which they can fold up, resting their behinds on the ground, keeping their torso upright. For humans the least marked interpretation would be sitting in a cross-legged fashion, though squatting, kneeling or any stance between lying and standing can be described statively as 'sitting'. Ngan'gityemerri additionally has a large set of dynamic verbs describing the assumption of such postures. The literal senses of 'lie' and 'stand' can, I think, in a volume such as this, be taken as already well explicated. The examples below then, draw attention to the literal postures of simple verb subjects:

- (25) Ngayi nginge-tye deminy-ngi-du, "Pat!"
1SG.PRO 1SG.S.lie.PI-PAST 3SG.S.hands.PF-1SG.O-touch arise
meny-ngiti.
3SG.S.say.PF-1SG.G
'I was lying down (asleep) when she woke me. "Get up!" she told me.'
- (26) Yini-pefi-tye peyipa nyinyi yini-wurrkama-tye.
2SG.S.sit.PI-DUR-PAST paper 2SG.PRO 2SG.S.sit.PI-work-PAST
'You sat around a while working on your papers.'

- (27) Mityity wagarri pey-endi widdibemgu,
 white woman two there-EMF 3PL.S.stand.PR.DLS
 yerr-tyagani-merrendi gentyerrmigi-baty nayf.
 TREE-what-LEST 2PL.S.hands.IR.DLS-hold knife
 ‘There were two women (airport metal-detector operators) standing
 there, lest the two of you might have something like a knife.’

In their copula functions ‘sit’, ‘lie’, ‘stand’, ‘perch’, ‘go’, and ‘travel’ are used to encode the existence/location of, or ascribe attributes to, their subjects. Existential clauses are simply statements about the existence of entities with respect to space and time. Ascriptive clauses employ the simple intransitive finite verbs to ascribe certain characteristics to their subjects. These characteristics can be expressed as either adjectives or through attributive NPs. As copulas, ‘sit’, ‘lie’, ‘stand’, ‘perch’, ‘go’, and ‘travel’ are used for both inanimate and animate subjects, necessitating a rather broader view of each posture. The discussion of posture below is exemplified with existential clauses.

In addition to animates that are in an obviously prone/supine posture, any inanimate that is not raised off the ground, and is conceived of as having significantly greater breadth than height, is said to ‘lie’ rather than ‘stand’. Thus, rivers, billabongs, roads, canoes, hills, felled trees, rocks, etc. all ‘lie’:

- (28) Ganbi kide? Yu, yu, kinyi gibem.
 didjeridu where yes yes here 3SG.S.lie.PR
 ‘Where’s the didjeridu?’ ‘Oh yes, it’s (lying) here.’
- (29) Nelen wunu-pefi wibem Malfiyin nem, nintyi wunggume
 road there-TH1TH 3SG.S.lie.PR M. 3SG.PRO knee one
 yenim . . .
 3SG.S.go.PR
 ‘Where that road to Malfiyin is (lies), as you go round that corner . . .’
- (30) ‘Ya eferri gibem-nyine’ meny-nin.
 hey bluetongue.lizard 3SG.S.lie.PR-FOC 3SG.S.say.PF-1DLINC.G
 “‘Hey there’s a bluetongue (lying) here,” he told us.’

Anything that is either raised above the ground on legs, or leg-like supports, or is conceived of as having significantly greater height than breadth, is said to ‘stand’. Of these two criteria, leg-having is predominant. Both centipedes and cars, for instance, despite their height to breadth ratios, ‘stand’ by virtue of their having ‘legs’. Note though that leg-having is not sufficient reason for something to ‘stand’ where it is not saliently raised off the ground. Thus although lizards (see (30)), goannas, and crocodiles have legs and the capacity to raise their bellies off the ground, they are viewed as being prototypically in contact with the ground, and

thus 'lie'. Other inanimates that 'stand' include buildings (and by extension, cities despite the height to breadth ratio of a city as a whole), trees, fridges, antbeds, billies, and jerrycans:²

- (31) Ngambinigerri-tye ngan-mawuny yerr-minbadi girribem.
1PLINC.S.travel.PI-PAST LOC-ironwood tree-big 3SG.S.stand.PR
'We went to where that big ironwood tree is (stands).'
- (32) Layt ngimbinyirri, dede tawun-mirri wirribem
light DLINC.S.see.PF country town-EMF 3SG.S.stand.PR
start-mem-pagu.
start-3SG.S.do.PR-HITH
'(From the plane) we saw lights, from where the town starts (outskirts
of Melbourne).'
- (33) Murriga nem-nyine girribem.
car 3SG.PRO-FOC 3SG.S.stand.PR
'There's his car (standing) there now.'
- (34) Room spare-one widdibenggu?
 3PL.S.stand.PR.DL.S
'Are there two spare rooms?'
- (35) Kuri bulbulfi wirribem kinyi, 'solar power' wirrim,
water hot 3SG.S.stand.PR here 3SG.S.say.PR
ganggi wibem wayim-baty fiti-ninggi.
high 3SG.S.lie.PR 3SG.S.heat.PR-hold sun-AGT
'There's a hot water (shower) (standing) here, 'solar power' they call it,
the sun heats up (the solar panels) (lying) on top.'

For small inanimate objects that are typically manipulated by humans, posture is, of course, not an inherent feature, but dependent on the position in which the object is left. In (36), a directive for finding a crowbar and axe, the former is said to be 'lying' on the table, the latter is said to be 'standing', presumably propped against a wall.

- (36) Kufa gibem-ngan-derri oldstore, table-nide wibem,
crow 3SG.s.lie.PR-LOC-back -LOC 3SG.s.lie.PR
bi pey-endi wirribem.
axe still-EMF 3SG.s.stand.PR
‘The crowbar’s in the old store, up on the table, there’s an axe there
too.’

For human subjects, 'sit' is the only stative simple verb that can be used existentially, and in this capacity it can be distinguished from the literal function of 'sit',

in being unmarked for posture. Thus in (37) below ‘sit’ is used to describe the presence of a person in his camp, out of sight, and therefore posture unknown. Example (38) was uttered by a person standing in a telephone booth.

- (37) Alawa kide? Wunu dedanggurr pey-endi girim.
 where there campsite still-EMF 3SG.S.sit.PR
 ‘Where’s Alawa?’ ‘He’s still over there in his camp.’
- (38) Minmi fepi minbadi ngirim, Tyandi yeyi syirre
 NEG hill big 1SG.S.sit.PR Sunday other behind
 ngi-pe kinyi.
 1SG.S.sit.IR-FUT here
 ‘No, I’m in Peppimenarti, I’ll be here for another week.’

Stative simple verbs are to be understood as describing the presence of a subject in a particular location, spanning a period of time throughout which the subject’s stance remains unchanged. Contrastively, the dynamic simple verbs allow for a more general interpretation of movement about the place, without any implication that the activity in question is necessarily in progress at all times. Given the requirement of unchanged stance, stative verbs describe temporary states whereas dynamic simple verbs have an association with semi-permanent states through their habitual and iterative readings. This opposition between transitory and permanent perspectives provided by the distinction between stative and dynamic simple verbs is also exploited in their copula functions. Examples (37) and (38) above both have ‘sit’ marking transient existential states. Compare them with the permanent perspective conveyed by the dynamic simple verb ‘go’ in existential function, in (39):

- (39) Yumemnimbi mipurr gagu waddi-tye.
 long ago men animal 3PL.S.GO.PI-PAST
 ‘Long ago men were totemic animals.’

Note that the copula use of simple verbs with inanimate subjects does not exploit this opposition between dynamic/permanent, on the one hand, and stative/transient on the other. This of course is unsurprising as the capacity for inanimates to undertake dynamic activity is typically low. All existential statements with inanimate subjects select the stative ‘sit’, ‘lie’, ‘stand’, and ‘perch’ simple verbs, taking the particular verb that its postural configuration determines.

Ascriptive clauses, attributing particular characteristics to their subject, are exemplified below. In (40), as in (39) above, this characteristic is attributed to inanimate subjects through an adjectival expression, in (41) through an attributive NP. Inanimate subjects do not take the dynamic simple finite verbs in this function. They only employ the stative verbs, and the choice between ‘sit’, ‘lie’,

and 'stand' is made in terms of the criteria set out above. Note, though, that in (42), a petrol gauge lying horizontally might plausibly be thought to 'lie', the choice of 'stand' as the ascriptive verb in this example appears to be predicated on the capacity of the needle to stand, rather than its actual degree of incline in this instance. The gauge referred to here is of the type where a needle is hinged from the bottom and the needle 'stands' upright when the tank is full, 'lies horizontally' when half empty, and 'points downwards' when empty.

- (40) Afirr bubungini winge-tye.
corpse decomposed 3SG.S.lie.PI-PAST
'The corpse was decomposed.'
- (41) Mudiga wasangari wirribem-nyine.
car clean 3SG.S.stand.PR-FOC
'The car's clean now.'
- (42) Nginyirri yerr-wunu petrol nem afwey-mirri
1SG.S.see.PF TREE-that 3SG.S.M.PRO halfway-EMF
wirringe-tye.
3SG.S.stand.PI-PAST
'I noticed that that petrol thing (gauge) was halfway down.'

In ascribing attributes to animate subjects, the choice between stative and dynamic simple verbs is also exploited to distinguish transitory versus permanent perspectives. This can be seen in (43) and (44), and in (45) and (46), in which the same adjectival characteristics are attributed to both stative and dynamic simple verbs respectively.

- (43) Lamurity dim.
happy 3SG.S.sit.PR
'She's happy (at the moment).'
- (44) Lamurity yenim.
happy 3SG.S.go.PR
'She's happy (by nature).'
- (45) Felfi dim.
alone 3SG.S.sit.PR
'He's on his own (at the moment).'
- (46) Felfi yedi-tye fenggiderrri.
alone 3SG.S.go.PI-PAST long time
'He lived alone (unmarried) for a long time.'

The attribution to subjects of characteristics can be expressed, not only with

adjectives, but with attributive NP's. In (47) the attributive NP is a simple nominal, in (48) it is a demonstrative, and in (49) it is a compound nominal.

- (47) Merretmen-nyine wannunggu.
 married.person-FOC 3PL.GO.PR.DL.S
 'Those two are married now.'
- (48) Depi kiniy ngagadi-tye
 head here 1SG.S.GO.PI-PAST
 ngatya ngayi pinat dingim-pup-tye-yedi.
 father 1SG.PRO peanut 3SG.S.mouth.PI-plant-PAST-3SG.S.GO.PI
 'When I was this high (accompanied by hand gesture) my father used to plant peanuts.'
- (49) Ngenike nyinyi wur-ngani-ngagurr-deti-gimi yenim.
 sister 2SG.PRO FEM-kind-1PLEX.PRO-same-SEMB 3SG.S.GO.PR
 'Your sister is a woman just like us (behaves like us).'

'Perch' differs from 'sit', 'lie', and 'stand' in being much rarer as a simple verb, and less productive in combining with coverbs to form complex verbs. In other respects, though, 'perch' forms a natural class with these three finite verbs: sharing their static as opposed to dynamic interpretation; being in aspectual terms inherently imperfective; and sharing their capacity to be serialized to the verb as an aspectual operator; and, as evident in (51), being used in existential function.

'Perch' essentially describes animates being raised off the ground, supported in that position by something other than a part of themselves. The vast majority of examples of 'perch' in my text database refer to birds located in trees. Less frequent examples include humans perched in trees to escape floodwaters, or for hunting purposes³, and one example of serialized 'perch' used to describe a clown walking about on stilts at a fair. I have recorded no examples of inanimate objects sitting in trees, described with 'perch'. This may be because they are specifically precluded, or simply due to the increased likelihood that they be treated as the patients of transitive verbs, rather than the subjects of 'perch'.

'Perch' also differs from the other three postural verbs in that it denotes a particular location, without a strong focus on postural configuration. To describe a human as being 'perched' thus draws particular attention to their being raised off the ground, without implying a 'sit', 'lie', or 'stand' posture in that location. Furthermore, as the stilt-walking clown example noted above suggests, while 'perch' is a stative verb, it does not preclude motion, nor requires the maintenance of an unchanging posture over time, as was noted for 'sit', 'lie', and 'stand'. Taken together, both these observations suggest that the archetypal subjects of 'perch' are birds rather than humans, for birds prototypically wheel and screech, preen, and flit about while perched, and for them the postural distinction between sitting,

lying, and standing is just not salient. Examples (50) and (51) below demonstrate human and bird subjects of 'perch':

- (50) Darrwa wirrtyinge-tye, egeningge-ne.
platform 3PL.S.perch.PI-PAST magpie.goose-PURP
'They were perched on a hunting platform (in the tree), (waiting) for geese.'
- (51) Kudede wani-nimbi, ewerrbalarr wirrtiyim-pe.
wet.season 3SG.S.go.IR-CAUS birds 3PL.S.perch.IR-FUT
'When the wet comes, there'll be birds in these trees.'

4. Posture finite verbs in complex verb constructions

The role of the posture finite verbs in complex verbs is broadly consistent with their function as simple verbs; that is, 'sit', 'lie', 'stand', 'perch', 'go', and 'travel' primarily categorize the posture/motion of the subject, and additionally encode the aspectual distinction between stative and dynamic activity. However a number of interesting variations arise due to the fact that the coverbs with which finite posture/motion verbs combine themselves have inherent aspectual qualities.

For the purposes of this discussion we divide the class of coverbs into two groups: those having an inherently dynamic character, and those that do not. Dynamic coverbs are those describing a change of location (e.g. *-pap* 'climb'), change of state (e.g. *-bubu* 'sleepy'), or change of posture (e.g. — *wap* 'sit down').

In general these dynamic coverbs are restricted to combining with the dynamic motion finite verbs, 'go' and 'travel'. The resultant complex verbs are aspectually perfective, that is, they are presented as single whole events without regard for their internal temporal constituency:

- (52) Ninymunggurr wanniny-pap.
escarpment 3PL.S.go.PF-climb.up
'They climbed up onto the escarpment.'
- (53) Yenim-bubu-nyine.
go.PR-sleepy-FOC
'He's become sleepy.'
- (54) Ngannunyu-wap belt ngirrmenygi-wurr.
1PLEX.S.go.PF.DL.S-sit seatbelt 1PLEX.S.handsself.PF.DL.S-enter
'We sat down and fastened our seatbelts.'

In addition, the stative postural finite verbs 'sit', 'lie', and 'stand' can also be combined with these dynamic 'change of location' and 'change of state' coverbs.

However this combination of stative finite verb with dynamic coverb gives a ‘resultant state’ reading. That is, it allows stativity and dynamicity to co-exist by construing the static state as the result of dynamic activity — implying that the subject is in the stative posture (described by the finite verb) that was achieved through the dynamic ‘change of location’ or ‘change of state’ activity (described by the coverb). Thus, compare (52) and (53) above with (55) and (56) below.

- (55) Winni-pappup-tye.
 3PL.S.sit.PI-climb-PAST
 ‘They were sitting up on top (having climbed up).’
- (56) Ngirim-bubu-nyine.
 1SG.S.sit.PR-sleepy-FOC
 ‘I’m sleepy now (having become sleepy).’

There is a constraint however on the combination of stative posture finite verbs with specifically ‘change-of-posture’ coverbs. Examples such as (57) below are rejected outright, and are not amenable to a ‘resultant-state’ reading.

- (57) *Ngirim-wap.
 1SG.S.sit.PR-sit
 ‘I’m sitting (having sat down).’

The second identifiable group of coverbs are those that do not have any inherently dynamic character that restricts their capacity to combine with stative finite verbs. We will call them ‘neutral’ coverbs. Coverbs from this neutral set freely combine with both stative and dynamic posture/motion finite verbs, forming complex verbs with an aspectually imperfective interpretation. They are understood to mark the activity as taking place within the one continuous time span throughout which the subject’s posture remains unchanged:

- (58) Ngini-fifi-tye peke.
 1SG.S.sit.PI-smoke-PAST tobacco
 ‘I was smoking a cigarette.’
- (59) Werrintyinim-wulil-tye.
 3PL.S.lie.PI-swim-PAST
 ‘They were swimming.’
- (60) Wirribem-ngiti-falmuy.
 3SG.S.stand.PR-1SG.G-stare
 ‘He’s staring at me.’
- (61) Asyinme wirrtyibem-kayki.
 sulphur-crested.cockatoo 3PL.S.perch.PR-call.out
 ‘Sulphur-crested cockatoos are crying out (perched in the trees).’

The postural classification provided by the stative finite verbs in their complex function is consistent with the comments made about their simple function earlier. 'Sit', 'lie', 'stand', and 'perch' all overtly describe the subject's specific posture (or location), though as is the case in the serialized and existential functions of the simple intransitives, for humans 'sit' is generally the unmarked choice for the stative finite verbs in complex function, having a primarily aspectual, rather than posture classifying, role.

Not all the coverbs in this second neutral set necessarily have a durative aspectual nature. Some, like *kilik* 'cough', are inherently punctual and must be marked as iterative through verbroot reduplication to be amenable to imperfective interpretation:

- (62) Ngini-kilik-tye.
 1SG.S.sit.PI-cough-PAST
 'I was coughing.'

The combination of unreduplicated punctual coverbs of this group with stative finite verbs is not a favoured construction. It is however possible and results in a semelfactive reading (i.e. one instance only of something typically iterative):

- (63) Ngiriny-kilik.
 1SG.S.sit.PF-cough
 'I gave a single cough.'

Example (63) also raises a major difference between the simple and complex functions of the stative finite verbs. Recall that the inherent imperfectivity of the stative finite verbs in their simple function prevented their inflection for the finite verb TAM category labelled 'perfective'. Thus we noted ((13) above) that the perfective inflection of the 'sit' finite verb cannot stand meaningfully as a simple verb. Contrastively, in their complex function the stative finite verbs can be inflected for either imperfective or perfective TAM categories. Thus an inherently durative coverb like *fifi* 'smoke' can either be described as an imperfective event, as in (64), or be construed as a single perfective event without regard to its internal temporal make-up, as in (65).

- (64) Ngini-fifi-tye.
 1SG.S.sit.PI-smoke-PAST
 'I was smoking.'
- (65) Ngiriny-fifi.
 1SG.S.sit.PF-smoke
 'I had a smoke.'

And an inherently punctual coverb like *kuduk* 'drink' can either be described as an imperfective event, as in (66), which will require reduplication of the verb root, or

be given as a single perfective event, as in (67).

- (66) Ti nginni-kukuduk-tye.
tea 1PLEX.S.sit.PI-drink-PAST
'We (PL.EXC) were drinking tea.'

- (67) Ti ngirriny-kuduk.
tea 1PLEX.S.sit.PF-drink
'We drank tea.'

This second set of neutral coverbs that are not specifically dynamic can also form complex verbs in combination with the dynamic 'go' and 'travel' finite verbs. These mark action as performed while moving about from place to place, or activity that is renewed at different places and on subsequent occasions:

- (68) Waddi-kayki-tye.
3PL.S.go.PI-call-PAST
'They called out (while going along).'
'They called out (at different places they went to).'

It is through this association with renewed activity, in contrast to the single unchanged timespan associated with stative finite verb selection, that dynamic finite verbs combined with these neutral coverbs can convey habitual activity. This can best be demonstrated by pairing the same coverbs with both stative and dynamic 'intransitive' finite verbs:

- (69) Ngirim-fifi.
1SG.S.sit.PR-smoke
'I'm smoking.'
- (70) Ngaganim-fifi.
1SG.S.go.PR-smoke
'I smoke (as a habit).'
- (71) Ngirim-kukuduk kuru.
1SG.S.sit.PR-drink beer
'I'm drinking beer.'
- (72) Minbe ngaganim-kuduk kuru lenggirr.
NEG 1SG.S.go.PR-drink water bad
'I don't drink alcohol.'
- (73) Ngambaty dini-pappup-kana-tye.
tide 3SG.S.sit.PI-climb-FOC-PAST
'The tide was high then.' [Lit. '... was sitting up having climbed up (resultant state).']

- (74) Ngambaty wani-pappup-ngini . . .
 tide 3SG.S.GO.IR-climb-FUT
 'When the tide comes up (as it habitually does) . . .'

5. Serialized posture verbs as aspect marking enclitics

5.1. The form of the construction in Ngan'gityemerri

Aspect cannot be said to be marked neatly in Ngan'gityemerri, with the task of marking aspectual information falling onto several overlapping subsystems, including finite verb inflection, coverb reduplication, and encliticized serial verbs. Discussion of finite verb inflection and coverb reduplication can be found in greater detail in Reid (1990). In this section we will focus on the single mechanism of using encliticized serial verbs to code aspectual information. It should be noted from the outset however that this strategy is largely redundant, in the sense that the information marked is largely already marked by other subsystems. We will return to consider the motivation for its adoption later in this section.

In contemporary Ngan'gityemerri the six intransitive finite verbs, 'sit', 'lie', 'stand', 'perch', 'go', and 'travel' can be serialized to the entire verbal complex as aspectual operators coding imperfective aspect. We can characterize this verbal structure as follows:

FINITE VERB — COVERB — SUFFIX GROUP — SERIAL FINITE VERB

Morphologically, these serialized posture/motion verbs function as enclitics to the complex verb, though they are distinguishable from the other enclitics that we have already encountered (such as focus and tense enclitics) by virtue of being added on as the final right-most element of that group. As their morphophonological status might suggest, these enclitics fall within the pitch contour assigned to the verbal complex as a single phonological word. They are assigned no stress, not even secondarily, and because they typically occur utterance finally, they are characterized by falling intonation and lack any auditory prominence.

Another characteristic of the serialized verb construction is that both the main verb and the encliticized posture verb are fully inflected finite verbs overtly coded morphologically for subject person/number and tense/aspect/mood categories. However strict agreement constraints make it clear that this is a complex monoclausal construction, rather than a bi-clausal paratactic construction.

An encliticized serial verb functioning as an enclitic must show concord with the main finite verb with regard to TAM inflection, and subject person and number. This is demonstrated in (75)–(77) below (these examples employ the

convention of bolding those components of the gloss which indicate the required concordance — a convention not maintained throughout the rest of this section).

- (75) Warri-batybity-pe-wirri.
3PL.S.poke.IR-sew-FUT-3PL.S.sit.IR
 ‘They will be sewing.’
- (76) Dangim-batybity-dim.
3SG.S.poke.PR-sew-3SG.S.sit.PR
 ‘She is sewing.’
- (77) Nganni-batybity-tye-nginni.
1PLEX.S.poke.PI-sew-PAST-1PLEX.S.sit.PI
 ‘We were sewing.’

Looking now at the subjects of encliticized serial verbs, note that person concord is always with the syntactic subject of the main finite verb. Ngan’gityemerri has an ‘impersonal verb’ construction where non-volitional patients get cross-referenced as the direct object of an unspecified referentless 3rd singular subject. These kinds of constructions, as in (78)–(81), are always translated by Ngan’gityemerri speakers into English constructions where the semantic patient is syntactic subject, as indicated by my translations, rather than the bracketed ‘literal’ translations. Even in such ‘impersonal verbs’ though, subject marking on the encliticized serial verb shows strict concordance with the referentless 3rd singular subject marking.

- (78) Dani-ngi-kada-tye-dini.
3SG.S.poke.PI-1SG.O-sad-PAST-3SG.S.sit.PI
 ‘I was feeling sad.’ (Lit. It was saddening me)
- (79) Danging-ngi-fulful-yenim.
3SG.S.poke.PR-1SG.O-twinge-3SG.S.go.PR
 ‘I keep feeling this “twinge”.’ (Lit. It was ‘twinging’ me)
- (80) Deme-nyi-mi-dit-tye-dini kuru-nimbi.
3SG.S.hands.PI-2SG.O-eye-ache-PAST-3SG.S.sit.PI liquid-CAUS
 ‘You still had a headache from the beer.’ (Lit. It was making your face ache)
- (81) Fidi-nide wa-ngirrki-syalat-pe-wiri.
heat-LOC 3SG.S.heat.IR-1DLEX.O-warm-FUT-3SG.S.sit.IR
 ‘We’ll get warm in the sunshine.’ (Lit. It will warm us)

Encliticized serial verbs show concord only with the subject marking that is cross-referenced on the main finite verb. Some Australian languages, like Gurr-goni (Green 1995), allow the subject of a serialized verb to be coreferential with the object of the main verb, a construction type well noted cross-linguistically for

coding causation (Li and Thompson 1976). In Ngan'gityemerri however, serials are tightly restricted in this regard: they must show full subject person/number, TAM, and polarity identity with the main verb.

Furthermore, serial verbs cannot additionally play host to non-subject marking. As is evident from (83) below, this constraint extends even to the copying of the indirect objects of reflexive verbs, where the Goal (G) is coreferential with the subject.

- (82) Ngeme-mbi-yen'gi-tye-ngini (*-mbi).
 1SG.S.hands.PI-2SG.G-tell.story-PAST-1SG.S.sit.PI (*-2SG.G)
 'I was telling you a story then.'
- (83) Demen-ne-dundum-yenim (*-ne).
 1SG.S.hands.self.PR-3SG.G-bury-3SG.S.go.PR (*-3SG.G)
 '(The sandfrog who) habitually buries himself in the sand.'

Likewise, the subject of the encliticized serial verb cannot represent the aggregate of the subject and non-subject arguments of the main verb. Thus in (84) below, the attempt to serialize a finite verb with 1st person exclusive dual subject marking, as the sum of the main verb's 1st person singular subject and 3rd person singular goal marking, is ungrammatical.

- (84) *Ngerim-ne-tyerr-baty-ngannunggu.
 1SG.S.hands.PR-3SG.G-mouth-hold-1PLEX.S.go.PR.DL.S
 'I am leading him along.'

Any violation of the requirement that the subjects of the main finite verb and the encliticized serial verb be fully coreferential, is quite ungrammatical. Note that an example like (84) could plausibly be interpreted as 'I lead him, we are going along', though to fulfil the phonological requirements of an independent paratactic clause *ngannunggu* (an enclitic in (84)) would have to be set off on its own intonation contour with primary word stress marking on its initial syllable, and of course this would neutralize the imperfective aspect reading. Alternatively, note that (84) could be repaired by substituting the encliticized finite verb *ngannunggu* 'we go' with *ngaganim* 'I go'.

As imperfective aspectual operators, the 'sit', 'lie', 'stand', 'go', 'perch', and 'travel' finite verbs can have the same sort of classificatory role with regard to posture/motion that they display as main finite verbs in general intransitive verbs. 'Sit', 'lie', and 'stand' classify the action of the verb with respect to the posture of human subjects, as demonstrated in (85)–(87).

- (85) Yawul karrityinmade ngebem-wurity-ngirim tyatma.
 spear bent 1SG.S.bash.PR-fix-1SG.S.sit.PR straight
 'I'm sitting straightening this bent spear.'

- (86) Yawul karrityinmade ngebem-wurity-ngibem tyatma.
 spear bent 1SG.s.bash.PR-fix-1SG.s.lie.PR straight
 'I'm lying straightening this bent spear.'
- (87) Yawul karrityinmade ngebem-wurity-ngirribem tyatma.
 spear bent 1SG.s.bash.PR-fix-1SG.s.stand.PR straight
 'I'm standing straightening this bent spear.'

However, in general, serialized aspectual finite verbs are bleached of any strong lexical semantic content, and it is the serialized 'sit' finite verb which is the posturally unmarked choice for imperfective actions performed within a single location. Thus (86) and (87) above can be said to be highly marked with respect to posture. Conversely, note that (88), employing the 'sit' finite verb, was naturally uttered by someone standing over a billy at the time.

- (88) Nginem-purrngpurrng-nyine-ngirim!
 1SG.s.heat.PR-boil-FOC-1SG.s.sit.PR
 'I'm boiling it right now!'

The choice of the 'go' finite verb as imperfective aspectual marker either denotes motion as in (89) and (90), habitual activity as in (91) and (92), or common knowledge facts as in (93) and (94). Serialization of 'travel' is quite rare, with example (95) one of the few in my corpus.

- (89) Werrmim-ne-tyerr-baty-wannim.
 3PL.s.hands.PR-3SG.G-mouth-hold-3PL.s.go.PR
 'They are leading him along.'
- (90) Wasangari-kana wirribem, yerim-fityi-pefi-yaganim.
 clean-FOC 3SG.s.stand.PR 2SG.s.hands.PR-roll-THITH-2SG.s.go.PR
 '(The car) is clean now, you can drive it away.'
- (91) Yerr-ngini-warrgudu-gumu
 TREE-KIND-dillybag-SEMB
 wunni-wutyitye-tye-waddi a-bilirri-ne.
 3PL.s.slash.PI-throw-PAST-3PL.s.go.PI ANIM-alive-PURP
 'They were repeatedly throwing a thing like a dillybag (a throw net) in order to catch live bait.'
- (92) Madewetimbi wa-mumu-nimbi resyin wurrmu
 long ago male-taboo-SRCE rations 3PL.s.snatch.PI
 -wawu-tye-waddi.
 -pick up-PAST-3PL.s.go.PI
 'In the old days they used to collect rations from the policeman.'

- (93) Detyeri-werri yenim dem-wurity-yenim mudiga.
 ear-ASSOC 3SG.S.GO.PR 3SG.S.hands.PR-fix-3SG.S.GO.PR car
 'He knows how to fix cars.'
- (94) Gagu a-niyen, a-yaga menyirr nganimuy-nide,
 animal ANIM-sandfrog ANIM-DEM sand loose-LOC
 demem-dundum-yenim kine puty-meny-me,
 3SG.S.hands.self.PR-bury-3SG.S.GO.PR this create-3SG.S.DO.PF-hand
 Niyen.
 N.
 'Ancestral Sandfrog, that one who always buries himself in the loose
 sand, he made this place, Niyen.'
- (95) Kala ngem-pup-nganmerr.
 dye 1SG.S.mouth.PR-place-1SG.S.travel.PR
 'I kept adding dye (to the dillybag).'

5.2. The diffusion of this construction type into Ngan'gityemerri

There is some evidence that this construction type, of serializing posture verbs to complex verb structures, has diffused into Ngan'gityemerri only fairly recently. The first piece of evidence comes from written records. For Ngan'gityemerri, a succession of descriptive studies, including Laves (n.d. [fieldnotes collected in 1930]), Tryon (1974), Hoddinott and Kofod (1989), and Reid (1990), provides a diachronic perspective which can shed some light on this question. Reid (forthcoming) for instance draws on the earlier studies to demonstrate radical morpho-syntactic restructuring that has turned a phrasal verb structure into a tightly glomped polysynthetic complex in the space of just several generations. Reid (forthcoming) notes that while most structural features of contemporary Ngan'gityemerri are to be found in Laves' 1930s data, there is little convincing evidence there of serialized posture verbs. In contemporary Ngan'gityemerri serialized posture verbs occur frequently in the types of narrative text that I have recorded. Laves' text corpus is substantial, includes narrative texts of similar genres, and could reasonably be expected to include serialized aspect-marking posture verbs if they were a feature of this language in the 1930s. However Laves' 1930s data represents a dialect of Ngan'gityemerri called Ngen'gimerri which is no longer actively spoken, and we must exercise some caution in drawing inferences about other dialects of Ngen'gityemerri on the basis of Ngen'gimerri, the more so when the focus of interest is likely to be an areally diffused feature. So even though we have some grounds to believe that Ngan'gityemerri has acquired serialized posture verbs since the 1930s, backing this up with other evidence would be more convincing.

The second factor suggestive of recent development draws on typologically driven expectations about the position of aspectual operators with respect to verbal nuclei. The ordering of these encliticized serial verbs, as the final element of the verbal complex in Ngan'gityemerri, stands as a counter-example to two of the general claims made by Foley and Van Valin about the relationship between aspectual operators and the verb nuclei over which they have scope. Foley and Van Valin (1984:210) claim that aspect is a nuclear operator while tense is a peripheral one. They argue that this difference in scope is reflected in ordering constraints in those languages that mark tense and aspect as separate inflectional categories. Quoting examples from Kewa (Franklin 1971) and Tiwi (Osborne 1974), they note that aspect is always marked closer to verb nuclei than tense, and add that "they know of no cases of the inverse ordering in which tense is closer to the stem than aspect" (Foley and Van Valin 1984:210). Similar claims are to be found in Bybee (1985).

In contradistinction to this claim, Ngan'gityemerri clearly marks tense closer to the verb nucleus than imperfective aspect. This is demonstrated in (96), where the past tense enclitic *-tye* immediately follows the coverb, and is in turn followed by the serialized 'sit' finite verb.

- (96) Wanni-batybity-tye-winni warrgudu.
 3PL.S.poke.PI-sew-PAST-3PL.S.sit.PI dillybag
 'They were sewing dillybags.'

Foley and Van Valin also describe the relationship between directionals and aspectual markers (both nuclear operators) in the following way: "Kewa also has directional suffixes and provides evidence that of the two nuclear operators aspect and directionals, aspect is the more inner. For when a verb is inflected for both aspect and directionals, aspect occurs immediately following the coverb, followed by the directional, followed in turn by tense" (Foley and Van Valin 1984:212). Unlike Kewa, in Ngan'gityemerri we find the directional enclitics (*pefi* in (97)) 'inside' the serialized aspect enclitic.

- (97) Wasangari-kana wirribem, yerim-fityi-pefi-yaganim.
 clean-FOC 3SG.S.stand.PR 2SG.S.hands.PR-roll-THITH-2SG.S.go.PR
 '(The car) is clean now, you can drive it away.'

While the ordered position of aspectual operators in the Ngan'gityemerri verb violates the ordering constraints that, according to Foley and Van Valin (1984:212), are widespread in the languages of the world, this does not so much weaken Foley and Van Valin's claim, as point to the recent development of these encliticized serial verbs. Clearly the serialized posture/motion finite verbs in Ngan'gityemerri are not good examples of aspectual operators. By weakly retaining some of their lexical semantic character, and by fully inflecting for subject and

TAM categories, they are still more than just simply markers of aspect. If these encliticized serial verbs in contemporary Ngan'gityemerri were to fully lose their lexical semantic characteristics and develop into simple aspect markers, one might predict, in view of Foley and Van Valin's claim, that they might shift inside the tense markers to a position closer to the coverb. Indeed in the neighboring language Marrithiyel this appears to be precisely what has happened. The tense/mood enclitics have shifted rightwards of the serialized posture verb, re-taking their place at the extreme periphery of the verbal complex, as in (98).

- (98) Marrithiyel (Green 1989:175)
 Awu nginj-bi-gangi-ya.
 meat 1SG.S.NJ.PF-cook-1SG.S.sit.PF-PAST
 'I was cooking the meat on the coals.'

These facts, the data available from historical records, and the peripheral positioning of posture verbs which are becoming aspect markers, all support a picture of the recent diffusion of this construction type into Ngan'gityemerri. Looking across the Southern and Western Daly languages, the minor differences described in their serialized posture verb constructions can be seen to represent increasing levels of subsequent grammaticalization. In (98), we saw that the Marrithiyel tense enclitics have now skipped rightwards of the serialized posture verbs. In Emmi, alone of all the Daly languages, the postural sense of the serialized 'posture verbs' is so weak that they can be freely serialized to a complex verb where the main finite verb is the exact same posture verb. This is demonstrated in (99) where the 'lie' finite verb is serialized to a complex verb which itself involves the same 'lie' finite verb:

- (99) Emmi (Ford 1998)
 Gaya-wiriya-gaya.
 3MIN.SR.lie-cry-3MIN.SR.lie
 'She's crying.'

In Emmi it seems that the repeated 'posture verb' is not really a posture verb at all — it has become a marker of nothing more than aspect. Combine this with the movement of the Marrithiyel serialized verb inside the final tense enclitic, and we may have some distributional evidence suggestive of greater grammaticalization of this areal construction type in the Western Daly languages than in the Southern Daly languages. And if variant degrees of grammaticalization can be successfully correlated with directionality in diffusion, then this might provide evidence that the marking of aspect through the serialization of posture verbs has come into Ngan'gityemerri from the Western Daly languages.

So what might the motivation for this construction type be? Both the Western and Southern Daly languages already have inflectional resources allowing verbs to be coded for imperfective aspect. In the available grammatical descriptions of all

these languages we find finite verb inflectional categories labeled something like ‘past imperfective’. Looking just at the past tense, the development of this construction type appears to be poorly motivated when the main finite verb already inflects for imperfective aspect. So in Ngan’gityemerri for example, while serialized posture verbs can be added to mark imperfective aspect, the main finite verb in these constructions already inflects for a category that is imperfective. Returning to Ngan’gityemerri (3) and (5), repeated here as (100) and (101), note that the main finite verb in example (100) is inflected for the TAM category Past Imperfective (PI), giving an imperfective ‘carried out over a period of time’ interpretation.

- (100) Nganni-batybity-tye.
 1 PLEX.S.poke.PI-sew-PAST
 ‘We were sewing.’

In (101) the addition to this complex verb of serialized ‘sit’ can at best be said to redundantly reinforce that aspectual information.

- (101) Nganni-batybity-tye-nginni.
 1 PLEX.S.poke.PI-sew-PAST-1 PLEX.sit.PI
 ‘We were sewing.’

However Ngan’gityemerri main finite verbs further inflect for three other TAM categories: ‘present’, ‘perfective’ and ‘irrealis’. Unsurprisingly the ‘perfective’ inflection is incompatible with the serialization of posture verbs (recall (13)). ‘Present’ is principally a tense category coincident with the speech locus, but also prone to habitual interpretation. ‘Irrealis’ is principally a mood category marking ‘unrealized’ events (future and past negative). So prior to the development of posture verb serialization, Ngan’gityemerri had no inflectional resources to distinguish between present (ongoing) and habitual or between future perfective and future imperfective. Postural serialized verbs fill a functionally useful niche here, illustrated in (102)–(105).

- (102) Ngerim-wurity yawul.
 1SG.S.hands.PR-make spear
 ‘I’m making a spear/I make spears.’
- (103) Ngerim-wurity-ngirim yawul.
 1SG.S.hands.PR-make spear
 ‘I’m engaged in making a spear now.’
- (104) Ngemi-wurity-ngini yawul.
 1SG.S.hands.IR-make-FUT spear
 ‘I’ll make a spear/I’ll make spears.’

- (105) Ngemi-wurity-ngini-ngiwi yawul.
 1SG.S.hands.IR-make-FUT-1SG.S.sit.IR spear
 'I'll be engaged in making a spear.'

There is considerable evidence to be found in Daly languages that complex verb systems are prone to neutralization and loss of functionality once they become locked into a polysynthetic complex structure. As an example of this, in the Ngan'gikurunggurr dialect of Ngan'gityemerri we find that the distinction between 'Present' and 'Perfective' TAM categories for which finite verbs inflect has been effectively neutralized through a word internal morphophonological rule that assimilates nasal/stop clusters (Reid 1990). In polysynthetic verbal complexes it is the core verbal elements that typically erode, and it is the outer boundaries where new material gets co-opted and put to inflectional work. So another motivation, in Ngan'gikurunggurr at least, for the adoption of imperfective aspect marking by serializing posture verbs is to regain a mechanism by which present and past perfective can be distinguished.

5.3. Serialized posture verbs marking aspect in Maningridan languages and Djapu

In the languages of the Maningridan subgroup (non-Pama-Nyungan) we also find evidence for serialized posture verbs marking aspect.⁴ Eather (1990:405), for example, notes that in Nakkara progressive aspect is expressed by a complex predicate made up of a main verb followed by a posture/existence verb. The three finite posture/existence verbs which mark progressive aspect in this way are *ni* 'sit, stay, be (at)', *dja* 'stand, be (at)', and *yu* 'lie, be (at)'. Similarly, continuous aspect is expressed by a complex predicate using the verb *ba* 'go' as a finite verb. (106) and (107) illustrate this construction.

- (106) Nakkara (Eather 1990)
 Rrba-kkabanja-rda rrba-ni-na kukka.
 3A-dig-PAST 3A-sit-PAST water
 'They were digging for water.'
- (107) Nakkara (Eather 1990)
 Ngibu-Ø-kkorddakkordda-ngiya ngirrba-rriba-na.
 1A-3M.O-eat game-PAST 1A-AUG-go-PAST
 'We kept on eating.'

The construction reported for Nakkara is also found in other languages of the Maningridan subgroup, including Burarra, and Ndjebbana, and, as demonstrated in (108) below, Gurrgoni.

- (108) Gurrgoni (Green 1995)
 Awu-ba-rri awurr-ma-nay.
 3AUG.A.3IO-eat-PRE 3AUG.S-go.along-PRE
 ‘They went on eating it (they ate on).’

For Djapu, Morphy (1983:89) notes that ‘sit’, ‘lie’, ‘stand’, and ‘go’ “may be used in conjunction with a main verb to denote durative aspect”. In (109) ‘stand’ is the main verb, and it is modified by ‘lie’ which precedes it and has a purely aspectual function. The choice of aspectual ‘lie’ here is dictated by two factors: the aspectual verb must be different to the main verb when the main verb is already a posture verb and ‘lie’ tends to be the most common choice of aspect verb anyhow. The modifying aspectual verb can either precede or follow the main verb.

- (109) Djapu (Morphy 1983)
 Bala’ yukurra dhaarra
 house lie.UNM stand.UNM
 ‘A house is standing (there).’

Summarizing the distributional situation, from the available evidence it appears that serialized posture verbs marking aspect have been innovated independently in several parts of Australia’s Northern Territory. This view is supported by both the language internal evidence, for some languages, of recent diffusion, and by the absence of this construction type in the areas between the Daly languages, the Maningridan languages, and Djapu. That similar looking constructions have developed independently is of course less surprising given the well attested typological tendency (Heine, Claudi, and Hünemeyer 1993; Heine and Reh, 1984; Bybee *et al.* 1994) for posture verbs to be put to aspectual work.

While these constructions in the Daly languages, the Maningridan languages, and Djapu equally demonstrate the cross-linguistically noted nexus between posture and aspect, we should however avoid overstating the similarities between these distributed pockets of serial posture verb construction. While the Maningridan and Djapu constructions have some broad similarities to the Daly examples, they also exhibit two significant differences. In the Nakkara example (106) *rrba-kkabanja-rda* is an independent verb, and there would appear to be good grounds for describing it as involving the serialization of a posture verb to mark aspect. However it is not serial to a complex verb in the sense of being a collocation of both finite stem and a coverb. Maningridan languages do not employ a second fully inflected finite verb within a complex but single-predicate construction, so we don’t find the kind of ‘doubling up’ of the same finite verb as shown for Emmi in (99). Secondly, in Maningridan languages and Djapu serial-

ized posture verbs remain independent words. However in Ngan'gityemerri, Marrithiyel, and Emmi, while the serialized posture verb remains finite, it has undergone cliticization and forms part of the phonologically defined 'complex verb word', and even moved (as in Marrithiyel example (98)) inside other now more peripheral enclitics.

Abbreviations

1=first person; 2=second person; 3=third person; A=transitive subject (in Maningridan); AGT=agent; ANIM=animal noun class prefix; ASSOC=associative; AUG=augmented number category (in Maningridan); CAUS=cause; CONT=continuous aspect (in Jaminjung); DEM=demonstrative; DL=dual; DUP=reduplicated; EMF=emphatic; EX=exclusive; FOC=focus; FUT=future; G=goal (indirect object); HITH=hither; INC=inclusive; IO=indirect object (in Maningridan); IR=irrealis; KIND=kind; LOC=locative; MALE=male noun class prefix; M=minimal number category (in Nakkara); NEG=negative; O=object; PF=past perfective; PI=past imperfective; PL=plural; PR=present tense; PRO=pronoun; PURP=purposive; S=subject; SEMB=semblative; SG=singular; SRCE=source; THITH=hither; TREE=tree/thing noun class prefix; UNM=unmarked (in Djapu).

Notes

1. All the western and southern Daly languages appear to have developed a predominant complex verb constituent ordering of 'finite verb + coverb', with several shared exceptions. All complex verbs formed with the 'say/do' finite verb (and a handful of other verbs) retain the prior ordering of 'coverb + finite verb'. For further discussion see Reid (forthcoming).
2. In Australian English, a *billy* is a small metal container used for boiling water on a fire, and a *jerrycan* is a 20 ltr. upright metal container typically used for carrying petrol.
3. A favoured way of hunting geese, for example, involved the construction of platforms in the tree canopy from which birds flying in to roost were clubbed down.
4. Note that in many other non-Pama-Nyungan languages we find complex verbs involving a coverb followed by a finite verb. Some such constructions are given aspectual labels, such as the Jaminjung 'progressive' construction in (i):

- (i) Jaminjung (Schulz-Berndt 2000):
 Booloog-mayan-biya yoorroo-yoo.
 drink-CONT-NOW 1PLINC.be-PR
 'Let's drink now.'

Note that such examples are regular coverb + finite verb constructions. So *yooroo-yoo* is the sole finite verb here. It is a constituent of the complex verb, not serialized to it, so such examples have been excluded from this study.

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CHAPTER 11

Posture verbs in Oceanic*

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1. Introduction

The Oceanic languages, of which there are in the vicinity of 500, form a relatively low-order subgroup of Austronesian. The posture verbs that will be of relevance in the discussion that follows are those with the meanings ‘sit’, ‘stand’, and ‘lie’, and in three very closely related languages also ‘squat’. The Oceanic languages have posture verbs with these meanings that are intransitive; some languages also have derivationally related transitive counterparts of one or more such verbs. For example, Manam has only an intransitive verb ‘sit’ *soaʔi*, while Toqabaqita has both intransitive *qono* ‘sit’ and transitive *qono-fi* ‘sit on’ (where *-fi* is a transitive suffix). It is intransitive posture verbs that will figure in the discussion.

Typically in Oceanic languages the posture verbs may be used either to express the subject referent’s being in the given posture — sitting, standing, lying — or his/her/its assuming the given posture — sitting up or down, standing up, lying down. Examples from Toqabaqita illustrate:¹

- (1) Keki qono ba-da nena?
3PL.IMPV sit LIM-3PL.PERS there
‘Are they just sitting there (doing nothing)?’
- (2) Qono qoko riki-a.
sit 2SG.SEQ look.at-3SG.OBJ
‘Sit down and look at it.’ (The addressee is standing at the moment.)

In some languages the assumption of a posture is expressed explicitly by some means, such as a directional marker. This is the case in, for example, Manam. Sentence (3), without a directional marker, expresses a sitting posture, while (4), with a directional marker, expresses movement to a sitting posture:

- (3) Raʔania soaʔi-baya.
never.mind sit-LIM
‘It’s no good just sitting (there, doing nothing).’

- (4) Go-soaʔi-ria.
 2SG.IRREAL-sit-downward
 'Sit down.'

Being in a posture normally implies an extension over time, while moving into a posture is typically of brief duration. It is the former rather than the latter uses of the posture verbs that will be relevant here.

In many Oceanic languages, posture verbs participate in two kinds of semantic/functional networks. First, they may exhibit lexical polysemy. More specifically, besides expressing a posture meaning, they also frequently have other meanings: locative meanings such as 'be (located) at a place' and 'dwell, reside, be at (a place)', and existential meanings such as 'exist', 'be available', 'be present'. And second, in some languages such verbs participate in lexical-grammatical networks: one and the same etymon has a lexical, posture meaning and a grammatical function, most often marking some kind of aspect. Both of these kinds of polysemy in which posture verbs often participate will be discussed here. A verb of posture may be involved both in a lexical and a lexical-grammatical polysemy.² For the time being I will speak of posture verbs exhibiting polysemies; the question of which meaning or function is historically primary will be considered later.

It will also be seen that there is not necessarily a clear-cut dichotomy between lexical and grammatical meanings and functions. While in some languages a grammatical function, such as aspect-marking, is carried by a grammatical element, a particle, in other languages a similar kind of function may be expressed by a lexical, verbal element.

Since the languages discussed here all belong in one genetic group, it is almost certainly the case that not all the languages that exhibit some such networks of polysemies have undergone those developments independently. That is, some of the similarities among languages that we find today are no doubt due to developments that took place in proto-languages from which the relevant languages are descended. However, there is also evidence that there have been some independent developments in the history of Oceanic. The situations in some of the languages are so different from those in others that they are almost certainly historically independent of the latter, in spite of some common general features.

While a number of verbs that refer to a posture or that have reference to a posture among their meanings have been reconstructed for Proto-Oceanic by various linguists, I do not see much merit in referring to the reconstructions here because they tend to be weak in their semantic aspects. Specifically, it is not clear whether the polysemies that one finds in the present-day languages were or were not present already in Proto-Oceanic.

The chapter is structured as follows. Section 2 contains some terminological discussion and introduces the kinds of verbs that will be relevant. Section 3

discusses and exemplifies polysemies in which verbs of posture participate in a number of Oceanic languages. Section 4 is a brief discussion of certain other verbs which, though not posture verbs, often participate in similar lexical-grammatical polysemies that posture verbs do. Such verbs will help throw some light on the developments in which posture verbs are implicated. Some general conclusions are drawn in Section 5.

2. Posture verbs in polysemies

Oceanic languages typically have verbs that serve to express what one might call locative, existential, and possessive situations or relations. In some languages such verbs also have posture meanings; in others they do not. Certain cases of the latter kind will be briefly considered in Section 4.

By a locative sentence is meant one that expresses the fact that the referent of the subject is at a certain location:

- (5) Jane is in the backyard.

In some languages sentences expressing locative relations may be verbless: the locative phrase alone is the predicate. In the present context, only those locative sentences whose predicate contains a verb will be considered.

An entity's being at a location may be fairly temporary, short-term, or it may be long-term or even permanent. Thus, the glosses one finds for verbs expressing locative relations in Oceanic include 'be at (a place)', which is usually non-specific as to the length of time at a location, and 'stay at (a place)', 'remain at (a place)', which suggest long-term presence at a location. Included here are also "locations of residence", meanings like 'dwell, reside at', which too are often encoded by the verbs to be discussed here.

By an existential sentence is meant here a sentence that, in some broad sense, expresses the existence of an entity or a type of entity:

- (6) There are unicorns.

In the Oceanic context, existential sentences, more often than not, express the existence of an entity at a certain location, often at a certain time:

- (7) There is a pig in the garden.

Sometimes an existential sentence carries a connotation of availability: because an entity or a certain kind of entity is found at a certain location at the given time, it is available:

- (8) Is there any beer?

The kind of glosses that one finds in Oceanic grammars for verbs used with an existential meaning include ‘exist’, ‘be found’, ‘be present’, ‘be available’.

In Oceanic languages it is typically the case that one and the same verb may be used to express both locative and existential meanings. The distinction between locative and existential uses of verb resides not so much in different meanings of the verbs as in a certain property of their subjects, specifically definiteness. When the subject of a locative/existential verb is definite, it is normally a locative relation that is expressed. When the subject is indefinite (whether specific, nonspecific or generic), it is normally an existential situations that is expressed. The following pair of examples from Manam illustrates this point. Both sentences contain the verb *soaʔi*; sentence (9), with a definite subject, expresses the location of the referent of the subject, while sentence (10), with an indefinite subject, expresses the existence, presence of the referent of the subject at a location. (In these two examples, the verbs are glossed ‘be at’ and ‘exist’, respectively. As will be seen later, the verb *soaʔi* also has a posture meaning; the glosses will be changed accordingly.)

- (9) *Dajale-lo abe ʔalea rua u-soaʔi.*
 D.-in already month two 1SG.REAL-be.at
 ‘I’ve been in Dangale for two months.’

- (10) *Tamoata teʔe anua-lo i-soaʔi.*
 man one village-in 3SG.REAL-exist
 ‘There is a man in the village.’

In some Oceanic languages, verbs that are used with locative and/or existential meanings can also be used in possessive sentences, where one entity, usually human, is said to possess another entity or type of entity. In many Oceanic languages possessive sentences are in essence existential sentences. This is illustrated by the next example, again from Manam. The subject is a possessive construction; the referent of the subject noun phrase is said to exist in relation to the referent of the possessor noun phrase:

- (11) *Tamoata boro ne di-soaʔi.*
 man pig POSS.3SG.AD 3PL.REAL-exist
 ‘The man has/owns pigs.’

Tamoata boro ne in (11) is a possessive construction, where *ne* is a possessive classifier. The sentence literally says ‘Pigs of the man exist’, ‘There are pigs of the man’.

The close links among locative, existential, and possessive sentence types in some languages have been discussed by, for example, Lyons (1967, 1968) and, from a different theoretical perspective, by Freeze (1992). Freeze also points out the difference in definiteness of subjects in locative and existential sentence types:

the subjects are definite in the former and indefinite in the latter. In the relevant Oceanic languages, possessive sentences are essentially existential sentences, and for that reason they will be subsumed under the latter. The main distinction made here will be between locative and existential sentences.

While a language may have quite a few verbs that specify posture (such as for different ways of sitting, standing, or lying; see Newman, this volume), it is a fairly restricted range of verbs that participate in the kinds of polysemy that will be of interest here. Verbs meaning ‘sit’ appear to be the most common ones, followed by verbs meaning ‘lie’, ‘stand’, and in a few closely related languages ‘squat’. Sitting, standing, and lying can be taken as the basic postures in the sense that they are the ones that languages are most likely to have simple lexemes for. It is primarily humans that can readily occupy all three postures. While not only humans but also inanimate objects may be extended vertically (“standing”) or horizontally (“lying”), only humans are normally thought of as occupying a truly sitting position (although the use of verbs ‘sit’ may be extended to some non-humans, including inanimates). Some higher animates can also assume postures that can be characterized as “sitting”. However, in Oceania the range of such animals was, until recently, very restricted, mainly to dogs and pigs. Among the three basic postures the one that is nearly uniquely human is sitting. This will be of some relevance later.

Foley (1986:145), when discussing marking of extended aspect by means of locative and posture verbs in Papuan languages, says that “the locational or postural verbs used — ‘stay’, ‘be at’, ‘sit’, ‘stand’, ‘lie’ — are all inherently extended in time: one does not normally stay, stand or lie for an instant; rather these actions are inherently durational, and this semantic fact reinforces their eligibility as grammatical indicators of extended aspect.” However, as pointed out by Newman (this volume), there are some important differences among the three postures in terms of the sensorimotor control required for maintaining them. And consequently there are differences between them in their extendedness in time. This too will be of relevance later.

In many Oceanic languages verbs that signify posture are also used in locative and existential (including possessive) sentences. Here a verb will be considered polysemous in this way only if it can be used in locative and/or existential sentences without at the same time specifying the posture of the subject referent; for example, if a verb that can mean ‘sit’ is also used in locative and existential sentences without necessarily implying that the relevant participant is in a sitting position. When used in this way, posture verbs will be said to be semantically unmarked locative and/or existential verbs. On the other hand, we will see that in some languages verbs ‘stand’ can only be used about relatively long objects in vertical position. This is not polysemy; nevertheless, it will be useful to include this kind of case in the discussion as well because a certain pattern emerges from that.

3. Polysemies involving posture verbs

In this section examples of lexical and lexical-grammatical polysemies are given from a range of Oceanic languages. In most cases, the developments are most likely independent of those in the other languages. It should be noted that the quality and detail of information available varies considerably. For ease of presentation, the relevant forms will be glossed with their posture meanings even if they do not signify posture.

3.1. Manam (Papua New Guinea)

The discussion of Manam posture verbs is based on my own field notes. Some of the data also appear in Lichtenberk (1983). In Manam the relevant verbs and their posture meanings are *soaʔi* ‘sit’, *tui* ‘stand’, and *eno* ‘lie’; see (12)–(14) respectively:

- (12) Rigin-o go-soaʔi.
 mat-on 2SG.IRREAL-sit
 ‘Sit (down) on the mat.’
- (13) Aine ene i-tui-tui ŋe ʔeʔa
 woman there 3SG.REAL-stand-RED RES.PRO 1PL(EXCL)
 tina-ma.
 mother-1PL.AD
 ‘The woman standing over there is our mother.’
- (14) Kadiaraŋ maka bale ne-na-lo i-eno
 K. here men’s.house POSS.3SG.AD-BF-in 3SG.REAL-lie
 be i-tan-taŋ.
 and 3SG.REAL-cry-RED
 ‘Kadiarang is lying in his house (and is) crying.’

Two of these verbs may be used as semantically unmarked verbs in locative and existential sentences, *soaʔi* ‘sit’ and *eno* ‘lie’, in which case they do not signify a sitting or a lying posture, respectively. The third verb *tui* ‘stand’ does not function as an unmarked verb because it always implies a vertically extended posture of the subject referent. However, as we will see, a vertically extended posture does not automatically result in the use of *tui*.

The choice among the three verbs is determined primarily by the nature of the referent of the subject, although sometimes the speaker has some choice in the matter. *Tui* ‘stand’ is only used with subjects whose referents can be thought as having a relatively long vertical extension upward from a base. It is used with subjects of any animacy status. An example with a human subject was given in (13) above. Example (15) below contains an inanimate subject:

- (15) Ariri i-alale-ra sema ne ilo-na-lo
 post 3SG.REAL-go-noisily coconut.shell that inside-BF-in
 i-tui-laʔo.
 3SG.REAL-stand-ANDAT
 'The post went (into the hole) with a crash and stood in the coconut shell.'

Houses also are, or at any rate can be, said to stand:

- (16) . . . be pera i-keli, ausoboi ne
 and family.house 3SG.REAL-build.house men's.house POSS.3SG.AD
 be austambaran ne be pera kana.
 and sacred.house POSS.3SG.AD and family.house POSS.3SG.AD
 Di-tui-tui.
 3PL.REAL-stand-RED
 ' . . . and he build a family house, his men's house and his sacred house
 and his family house. They [the houses] stood [there].'

As will be seen further below, there is some interplay between *tui* 'stand' and *eno* 'lie'.

Soaʔi 'sit' is used as a semantically unmarked locative/existential verb with subjects whose referents are human or other higher animates, or boats on water. The category of higher animates traditionally included humans, pigs, dogs, and birds, and today also recently introduced animals such as goats and horses. Example (17) is a locative sentence with a human subject:

- (17) Barasi rua ʔau taun-lo u-soaʔi.
 year two 1SG town-in 1SG.REAL-sit
 'Two years I was/stayed/lived in the town.'

The sentence in (18) is an existential one with a subject that refers to canoes on the surface of the sea:

- (18) Maʔasi-lo ʔati rua di-soaʔi.
 sea-in canoe two 3PL.REAL-sit
 'There are two canoes at sea.'

In (19) the verb *soaʔi* occurs in a possessive relative clause with a subject referring to pigs:

- (19) Tamoata boro ne-di di-soaʔi ʔe teʔe
 man pig POSS-3PL.AD 3PL.REAL-sit RES.PRO one
 da-waur-i-be da-eluaʔ-i.
 3PL.IRREAL-tie-3SG.OBJ-and 3PL.IRREAL-bring-3SG.OBJ
 'Men who have/own pigs will (each) tie up and bring one.' (Lit. 'Men
 whose pigs sit/exist, they will tie and bring one.')

If a posture verb other than *soaʔi* occurs with a type of subject that takes *soaʔi* as an unmarked locative/existential verb, it necessarily signifies the given posture:

- (20) ʔaiʔo mara-ma-i-ru go-tui.
 2SG space.between-1PL(EXCL).AD-BF-DU 2SG.IRREAL-stand
 ‘Stand between the two of us.’
- (21) Boro pera eruma-na-lo i-eno.
 pig house space.below.3SG.AD-BF-in 3SG.REAL-lie
 ‘The pig is lying/sleeping under the house.’²³

The third verb *eno* ‘lie’ is best described as the elsewhere form. It is used when neither *soaʔi* ‘sit’ nor *tui* ‘stand’ are appropriate. As an unmarked locative/existential verb it can be used only with inanimate subjects other than canoes on water surface and only when the notion of extended upward verticality is not applicable, because it is absent or because it is irrelevant. The examples below illustrate some of the range of the use of *eno*. While in some cases the entity in question may though does not have to be in a “horizontal elongated position” (Newman, this volume), in many other cases it simply cannot be so. The locative sentence in (22) illustrates the use of *eno* in relation to an entity that may but need not be in a lying position:

- (22) Asi ne-gu inaja i-eno?
 bushknife POSS-1SG.AD where 3SG.REAL-lie
 ‘Where is my bushknife?’

However, in (23), a possessive sentence, the entities cannot occupy a horizontal extended position because of their round shape:

- (23) Bisi ne-m di-eno ʔi tago?
 bead POSS-2SG.AD 3PL.REAL-lie OR NEG
 ‘Have you got (any) beads or not?’

The position of an entity may be extended along a surface, although not primarily horizontally; still *eno* is used, as in the next existential sentence:

- (24) Dara ʔusi-n-o di-eno-ramo.
 blood skin.3SG.AD-BF-on 3PL.REAL-lie-all.over
 ‘There is blood all over his body (Lit. skin).’

The smoke coming out of a volcano can be described as “lying” (at least in times other than during eruptions):

- (25) Kaituka Manan-lo ewa kasu-ka ʔe i-en-eno.
 now M.-in fire smoke-PROD.3SG.AD.REAL this 3SG.REAL-RED-lie
 ‘Now the smoke of the fire is on Manam (Island).’ (Smoke that comes out of the mouth of the volcano.)

However, when smoke is rising in a column it is described as “standing”:

- (26) Ewa kasu maka maka i-tui-tui.
 fire smoke.3SG.AD here here 3SG.REAL-stand-RED
 ‘The smoke of the fire is rising here.’

In the next example the entity in question can hardly be said to rest on another one, in whatever orientation: the cutting edge of a knife is an integral part of the knife.

- (27) Asi mata i-eno.
 bushknife cutting.edge.3SG.AD 3SG.REAL-lie
 ‘The bushknife is sharp.’ (Lit. ‘The bushknife’s cutting edge lies/exists.’)

Eno is also used with subjects that refer to abstract notions, such as work (28) and sickness (29):

- (28) Malipi di-eno, masa n-duma-iʔo.
 work 3PL.REAL-lie INDEF.IRREAL 1SG.IRREAL-help-2SG.OBJ
 ‘If there is work, I’ll help you.’
- (29) More ilo-gu-lo i-eno.
 sickness inner.belly-1SG.AD-in 3SG.REAL-lie
 ‘I’m sick in the belly.’ (Lit. ‘The sickness is in my belly.’)

As discussed above, with boats resting on the surface of water it is *soaʔi* ‘sit’ that is used (example 18), even though a canoe does occupy an extended horizontal position. In other situations when a boat is horizontal, it is *eno* that is used:

- (30) ʔati reba-reba maʔasi ilo-na-lo i-eno.
 canoe sail-RED sea inside.3SG.AD-BF-in 3SG.REAL-lie
 ‘The sailing canoe is/lies at the bottom of the sea.’

Before concluding the discussion of the posture-locative/existential polysemies in Manam, it is worthwhile to emphasize two points. First, the choice of the two semantically unmarked verbs *soaʔi* ‘sit’ and *eno* ‘lie’ is sensitive primarily to the higher-animacy status of the subject: with higher-animate subjects (and with boats on water surface) it is the former that is used; with all others the latter. And second, of the three basic posture verbs the one with the meaning ‘stand’ does not function as a semantically unmarked locative/existential verb.

Two of the three posture verbs in Manam are also used with aspect-marking functions. Significantly, the two verbs are those that may also function as semantically unmarked locative and existential verbs: *soaʔi* ‘sit’ and *eno* ‘lie’. *Tui* ‘stand’, which does not have a locative/existential meaning, is not used aspectually. *Soaʔi* ‘sit’ is used with a progressive-aspect marking function: an action is in progress at reference time; and *eno* ‘lie’ is used with a frequentative/continuative/persistent-

- (35) η ai tago i-pura-ka u-rapu-rapuŋ-i.
 3SG NEG 3SG.REAL-arrive-FOC 1SG.REAL-wait-RED-3SG.OBJ
 U-rapu-rapuŋ-i-be u-soaki.
 1SG.REAL-wait-RED-3SG.OBJ-and 1SG.REAL-sit
 'It's because he did not arrive that I'm waiting for him. I am/have been waiting for him.'

While *soaʔi* can be used with a variety of verbs to indicate an event in progress even if the event in question does not normally involve sitting, it is not so used with verbs whose meaning is completely inconsistent with sitting:

- (36) *I-pa-panana-be i-soaʔi.
 3SG.REAL-RED-run-and 3SG.REAL-sit
 ('He/she is running.')
- (37) *I-eno be i-soaʔi.
 3SG.REAL-lie and 3SG.REAL-sit
 ('He/she is lying/sleeping.')

When it marks the progressive aspect, *soaʔi* is the sole constituent of its clause. In the next example, the clause in which *soaʔi* occurs also contains the locative form *ene* 'over there', and *soaʔi* does not have an aspectual function:

- (38) Onkau guma dua di-onot-a-di be
 O. ASSOC.PL door 3PL.REAL-close-BF-3PL.OBJ(BEN) and
 ene di-soaki.
 over.there 3PL.REAL-sit
 'They had closed the door on Onkau and his fellows, and they [Onkau and his fellows] were/were sitting [in] there.'

And when a *soaʔi* clause precedes the clause of another event it can only have a posture or a locative/existential meaning:

- (39) I-soaki-be i-ra-i . . .
 3SG.REAL-sit-and 3SG.REAL-speak.to-3SG.OBJ
 'He was/sat (there) and spoke to him . . .'

The other posture verb that can be used with an aspectual function, *eno* 'lie', expresses a frequentative or continuative aspect, the usual implication being one of persistence or of doing nothing but that. Like *soaʔi*, aspect-marking *eno* occurs in a minimal clause of its own, which follows the clause encoding the event whose aspect it marks. The two clauses are connected by the coordinating conjunction 'and'. However, unlike *soaʔi*, whose subject marker must be the same as that of the event-encoding verb, the subject marker of *eno* is always third-person singular, regardless of the subject marker of the first verb. In other words,

the subject marker of *eno* refers to the preceding clause as a whole: it is the overall situation encoded in the first clause that is frequentative, continuative. Borrowing (and adapting) terminology from studies of verb serialization, constructions with *soaʔi* can be characterized as “same-subject coordination” and those with *eno* as “ambient-subject coordination” (for ambient serialization see T. Crowley 1987). The verb encoding the event is often (though not always) reduplicated and also carries the ‘limiter’ suffix *-la*. Below are given a few examples of the use of *eno* with an aspect-marking function. The first two show that the subject prefix on *eno* must be third-person singular regardless of the subject marker on the event-verb:

- (40) ʔaiʔo ʔu-malipi-lipi-la-be {i-eno / *ʔu-eno}.
 2SG 2SG.REAL-work-RED-LIM-and 3SG.REAL-lie / 2SG.REAL-lie
 ‘All you do is work.’
- (41) ʔan-to lasa ne-min-to
 2PL-PAUC enemy POSS-2PL.AD-PAUC
 ʔa-resabar-idi-a-la-na-to-be i-eno.
 2PL.REAL-provoke-3PL.OBJ-BF-LIM-BF-PAUC-and 3SG.REAL-lie
 ‘You kept provoking your enemies.’
- (42) I-pile-la-be i-eno.
 3SG.REAL-speak-LIM-and 3SG.REAL-lie
 ‘He kept talking.’

As the next example demonstrates, *eno* as an aspectual marker can be used with a verb whose meaning is inconsistent with the posture meaning of *eno*:

- (43) Maŋ pera atabala i-ro-laʔo-la-be
 bird house on.top.3SG.AD 3SG.REAL-fly-ANDAT-LIM-and
 i-eno.
 3SG.REAL-lie
 ‘The bird keeps on flying above the house.’

Summing up for Manam: two of the three basic posture verbs are also used as semantically unmarked verbs in locative and existential sentences. The same two verbs are also used with aspectual functions. In their aspectual functions they remain verbs: they occur in their own clauses. However, they are the only constituents of such clauses, and there are restrictions on their subject markers.

3.2. Numbami (Papua New Guinea)

Like Manam, Numbami is a member of the Western Oceanic subgroup of Oceanic, but within that grouping the two languages are related only distantly. Unless

specified otherwise, the information on Numbami comes from Joel Bradshaw (pers. comm., July 2000). The relevant verbs in Numbami are *ndo* 'sit', *walasa* 'stand' and *iye* 'lie'. There are some parallels between Manam and Numbami. The verbs 'sit' and 'lie' can be used as semantically unmarked locative and existential verbs, while 'stand' cannot (it always signifies a standing posture). The verb 'sit' is used with animate subject referents. Bradshaw gives the following as the meanings of *ndo*: 'sit, stay, dwell, remain, exist, be, be alive, be awake'. For example:

- (44) Awa ko-i-ndo kapala lalo.
 mother there-3SG-sit house inside
 'Mother is over there inside the house.'
- (45) Aiya u-ndo mo u-iye wai?
 2SG 2SG-sit or 2SG-sleep finish
 'Are you awake or have you gone to sleep?'

The verb 'lie' is used as a locative/existential verb with inanimate subject referents. Bradshaw gives these meanings for *iye*: 'lie, be on, be at; exist (of inanimates); lie inert, sleep (of animates)'. For example:

- (46) Biyaga i-iye tendana?
 knife 3SG-lie where
 'Where's the knife?'
- (47) Nanggi buwa ta-i-iye.
 GEN.1SG betelnut here-3SG-lie
 'I have a betelnut (here).'

(For an example of *iye* with the meaning 'sleep' see (45) above.)

The verb 'lie' can also be used as a locative verb in ambient serialization. In this function it serves to identify the location of the event encoded by the preceding verb and its arguments. The subject marker on *iye* is always third person singular: it refers to the proposition encoded by the first verb and its arguments. (*Iye* can also be used in same-subject and switch-subject serialization, where it identifies the location of the referent of the subject or direct object, respectively, given the animacy conditions specified above. The verb 'sit' also can be used in this way, again subject to the animacy conditions.) In (48) the subject and the object of the first verb are first person plural exclusive and third person plural, respectively, but the subject prefix on *iye* is third person singular: it refers to the proposition 'we found them':

- (48) I ma-pisa ai i-iye weni.
 1PL(EXCL) 1PL(EXCL)-find 3PL 3SG-lie bush
 'We found them in the forest.' (Bradshaw 1993:55)

For another example see (50) below.

The verb *ndo* ‘sit’ has, in addition to its posture and locative/existential meanings, an aspectual function, which Bradshaw characterizes as “durative”. In this function it occurs as the final verb in same-subject serialization. When *ndo* indicates duration, it may occur with inanimate subjects (which it cannot in its postural and locative/existential meanings), and it may even occur with another posture verb which identifies a posture other than sitting; see (49) and (50) respectively:

- (49) Bani manu yaweni i-ndo, ma-wasa ma-uya bele . . .
 food aforesaid fire.eat 3SG-sit 1PL(EXCL)-go 1PL(EXCL)-wash plate
 ‘(While) that food stays cooking, we go wash the dishes . . .’ (Bradshaw 1999:285)

According to Bradshaw (pers. comm.), *ndo* indicates duration in (49).

The next example shows not only the durative-marking function of *ndo* but also the locative use of *iye* in ambient serialization. Note that ‘lie’ is used even though the subject of the first verb is human:

- (50) Ma-iye ma-ndo, wamba kikiya-ma ma-ndisa
 1PL(EXCL)-lie 1PL(EXCL)-sit morn dark-ADV 1PL(EXCL)-arise
 i-iye koe Ampo.
 3SG-lie there A.
 ‘We slept on, and before dawn we woke up over at Ampo.’ (Bradshaw 1993:154)

To recapitulate: of the three Numbami posture verbs ‘sit’, ‘stand’ and ‘lie’, only ‘sit’ and ‘lie’ can be used as unmarked locative/existential verbs, the former with animate and the latter with inanimate subjects (including ambient serialization). The verb ‘sit’ also marks the durative aspect, in which case it occurs as the final verb in a same-subject serial construction. Recall that in Manam the verb ‘sit’ is used to mark the progressive aspect but that often there is an implication of some temporal extent. In both languages the forms in question are verbs when they function aspectually: in Manam they occur in their own minimal clauses and in Numbami in serial verb constructions.

3.3. Lewo (Vanuatu)

The data on which the following discussion of Lewo is based come from Early (2000). The relevant Lewo verbs are *to* ‘sit’, *su* ‘stand’ and *mo(no)* ‘lie’. All three verbs can occur with human subjects in sentences that Early calls “existential”, which in the terminology of this chapter subsumes locative and existential meanings. Early says that when they function as “existentials” it is not clear to what extent their posture meanings are retained (but see below):

- (51) O-su pe.
2SG.SU-stand where?
'Where have you been?' (Early 2000: 86)
- (52) Sisi tai ø-to.
child ART 3SG.SU-sit
'There was a young child.' (Early 2000: 86)
- (53) e yuñā naḻa yaru nene ø-mo e-a
LOC house REL man DEIC 3SG.SU-lie LOC-3SG.OBJ
'at the house where that man slept/lived/was' (Early 2000: 86)

More often than not these posture verbs occur either with the continuous/progressive marker *ke* or with the durative/iterative/habitual marker *m̃a*, and in such cases they appear to function as semantically unmarked locative/existential verbs. Unlike in Manam and Numbami, where there are restrictions on the types of subject that the unmarked locative/existential verbs 'sit' and 'lie' take, in Lewo all three verbs can occur with the same type of subject. Rather, the differences among the three verbs have to do with the duration of the location or existence of the subject referent: "*su* 'stand' indicates general existence, *to* 'sit' indicates temporary or short duration, and *mono* 'lie' indicates extended or permanent duration, but all in a fairly relative way" (Early 2000: 90). Examples (54)–(56) contain the durative aspect marker:

- (54) Me-to-m̃a Vila.
1PL(EXCL).SU-sit-DUR V.
'We stayed in Vila [town].' (Early 2000: 90)
- (55) Me-su-m̃a Vila.
1PL(EXCL).SU-stand-DUR V.
'We lived at/stayed at Vila. (Early 2000: 90)
- (56) Me-mo-m̃a Vila.
1PL(EXCL).SU-lie-DUR V.
'We lived in Vila.' (Early 2000: 90)

The next three sentences contain the continuous-aspect marker (note that all three verbs undergo a vowel change in the presence of the aspect suffix):

- (57) Naga ø-pa ø-si-ke amio sira naḻani.
3SG 3SG.SU-REAL.go 3SG.SU-stand-CONT COM girl this
'He went and was staying/living with this girl (lived with her family, no relationship).' (Early 2000: 91)

- (58) Naga ø-pa ø-te-ke amio sira naḽani.
 3SG 3SG.SU-REAL.go 3SG.SU-sit-CONT COM girl this
 'He went and was staying with this girl (short relationship).' (Early 2000:91)
- (59) Naga ø-pa ø-me-ke amio sira naḽani.
 3SG 3SG.SU-REAL.go 3SG.SU-lie-CONT COM girl this
 'He went and was living with this girl (set up home together).' (Early 2000:91)

This kind of distinction of extension in time appears also found with inanimate subjects, with the three verbs not marking the postural orientation of the subject referent. The sentence in (60) is about a standing, living tree; the verb 'lie' indicates "extended temporal duration" (Early 2000:91):

- (60) Pawa puru-tawo tai ø-mē-ke e-a.
 big tree-nut ART 3SG.SU-lie-CONT LOC-3SG.OBJ
 'There was a big nut tree there./There had been a big nut tree there for some time.' (Early 2000:91)

There are some outstanding questions about the properties of the three posture verbs of Lewo; however, the following seems reasonably clear: first, all three verbs can be used as unmarked locative/existential verbs; and second, the differences among them have to do (at least partially) with relative temporal extension. What is particularly noteworthy is the fact that it is the verb 'lie' that signifies the (relatively) longest temporal extension. Recall that in Manam the verb 'lie' is used to express the frequentative/continuative/persistent aspect, which implies extension in time. And like in Manam and Numbami, the three forms are formally verbs in all of their functions.

3.4. Tamambo (Vanuatu)

Like Lewo, Tamambo is a member of the North-Central subgroup within Oceanic; however, within that group the two languages do not appear to be particularly closely related. The Tamambo data come from Jauncey (1997).

The relevant verbs in Tamambo are *ate* 'sit', *turu* 'stand', and *eno* 'lie'. Besides their posture meanings, they have other uses. They are used with a locative function. Jauncey characterizes their meanings as 'be (at)'. (There is no mention of any existential uses.)

- (61) Le ate?
 TA sit
 'Is she there?' (Jauncey 1997:307)

- (62) Ku sahe ku-le eno vatarahi na heletu jala.
 1SG go.up 1SG-TA lie wait ART pig wild
 'I went (up to the bush) and was there waiting for the wild pig.'
 (Jauncey 1997:307)

The differences among the three verbs have to do with relative temporal extension, but not in the same way that Early finds in Lewo. Jauncey sees the differences in the degrees of temporal extension as stemming from the posture meanings of the verbs: "Length of time is tied to the semantics of the verb, in that *туру* 'stand' denotes a shorter length of time to 'be' somewhere than *ate* 'sit', which in turn is a shorter time span than indicated by *eno lie*." (Jauncey 1997:307).

According to Jauncey, the posture verbs occur in another function as the non-initial member of serial verb constructions when a reference is being made to the location of the event encoded by the preceding verb or verbs; but she says there are also temporal factors involved. Thus, for example, 'lie' implies a relatively longer temporal extent than 'sit'. The next three examples illustrate the posture verbs in verb serialization:

- (63) Mo mate mo eno ana lanjelanje.
 3SG die 3SG lie PREP coral
 'He died there on the coral.' (Jauncey 1997:379)
- (64) . . . mo sohi mo ate mo tua-i vorivori.
 3SG hide 3SG sit 3SG some-LINK little
 ' . . . he hid there [on a road mentioned in the previous clause] a little while.' (Jauncey 1997:380)
- (65) Mo karu mo jivo mo turu ana tarusa . . .
 3SG wade 3SG go.down 3SG stand PREP sea
 'He waded down there in the sea . . .' (Lit. 'He wades he goes down he stands in the sea . . .')⁴ (Jauncey 1997:380)

However, it is not clear that such use of the posture verbs represents a separate function. First, as Jauncey (p. 379) says "[c]hoice of *туру* 'stand', *eno* 'lie' or *ate* 'sit' does seem to depend to some extent on the literal meaning of the verb", and in the examples above the verbs are not interchangeable. And second, as Jauncey suggests, they retain the temporal-extent marking function.

It appears then that the distinctions among the three verbs are (primarily?) those of relative temporal extensions of being at a location or in existence: 'stand' signifying the shortest and 'lie' (like in Lewo) the longest extension. Like in Lewo, the Tamambo forms are always fully fledged verbs.

3.5. Loniū (Papua New Guinea)

Loniū is related only quite distantly to the (other) Oceanic languages. Either it belongs to a separate first-order subgroup of Oceanic, or its group is, in fact, in a sister relation to Oceanic (Blust 1998). The developments in Loniū give every indication of being independent from all the others discussed here. The Loniū data come from Hamel (1994).

Hamel's discussion of the Loniū posture verbs is not very detailed, and there are some unclarities; nevertheless, some interesting points do emerge. There are two posture verbs in Loniū that are of interest. One is *ɣe*, for which Hamel gives the following sets of glosses: 'be in a place (esp. sitting), stay, live in a place (implies comfort and/or long duration)' and 'be in/on a place; sit'. The other is *sɔw/sow* 'be temporarily in a place, usually standing', with a variant form *sɔ* 'be in/on a place; stand' (see below for discussion). There is no mention of any properties of the verb 'lie' which would be relevant in the present context. Both 'sit' and 'stand' can be used with locative meanings.

Given the fairly fragmentary nature of the information that Hamel gives about the Loniū posture verbs, there is a danger of misinterpretation; however, there are certain points that she is explicit about. Certain verbs, the two posture verbs among them, may function as "auxiliaries". They seem to be considered auxiliaries mainly because they modify the meanings of the verbs with which they occur. On formal grounds, they appear to be verbs. Unlike all the other languages considered thus far, the auxiliary posture verbs (like the other auxiliaries of Loniū) precede the other verb(s). Concerning the two posture verbs in their auxiliary functions Hamel (1994: 109) says:

The verb[s] *ɣe* and *sɔ* are used as auxiliaries to indicate the location of the subject at the site of the activity expressed by the main verb, and may imply some duration. The verb *ɣe* usually implies longer duration, and an informal or relaxed atmosphere — it is often translated as 'sit'. The verb *sɔ* tends to imply a more temporary stay, usually in a standing position. As a pre-verbal auxiliary, *sɔ* is only used with the main verb *čɛlu* 'stand', but as a co-verb . . . *sɔ* occurs alone with the same meaning 'stand'. The combination of *sɔ čɛlu* is thus 'stand for a short time'.

By "co-verbs" Hamel means the use of a restricted set of verbs that occur after main verbs. Most of the elements that can function as co-verbs can also function as auxiliaries. As far as the posture verbs are concerned, when they function as co-verbs they are used in locative expressions:

- (66) *eto kala hutu pun a yo ile pɔʔɔ pu*
 2PAUC POT.NONSG.go get pepper POSS 1SG 3SG.go within banana
a yo iye ta palaketuŋ.
 POSS 1SG 3SG.sit LOC veranda
 ‘Go get my pepper which is among my bananas over on the veranda.’
 (Hamel 1994: 120)

- (67) *eto kala hutu humey iso tah itiyen.*
 2PAUC POT.NONSG.go get fruit 3SG.stand LOC DEM
 ‘Go get some fruit from over there. (Hamel 1994: 121)

As these two examples show, both ‘sit’ and ‘stand’ can be used with inanimate subjects when functioning locatively, but, unfortunately, no further information is available.

Example (68) contains an instance of the combination *sɔ čɛlu* (see the quote above), where *sɔ* is an auxiliary:

- (68) Wow *ɛsɔ čɛlu ɛy.*
 2SG 2SG.stand stand PRO
 ‘You stand on it (for a short time).’ (Hamel 1994: 109)

The only example of *yɛ* as an auxiliary given by Hamel in her discussion of the auxiliaries is the following:

- (69) *Hah keyɛ in an.*
 2PL POT.NONSG.sit drink water
 ‘Help yourself to water.’ (Hamel 1994: 107)

Hamel makes no comment on duration with respect to (69) (see the quote above).

Even though there is much that is not clear about the Loniū posture verbs, Hamel does say that when the verbs ‘sit’ and ‘stand’ signal duration, the former tends to imply relatively longer temporal extendedness than the latter, a situation reminiscent of that found with respect to the corresponding verbs in Tamambo (Section 3.4). And in their duration-signalling function the forms are verbs.

As will be seen in Section 4.2, Loniū has a non-posture locative verb that has an aspectual function.

3.6. Toqabaqita (Solomon Islands)

Toqabaqita is only fairly distantly related to all the other languages discussed here, and, again, the developments there are very likely to be independent of those in the other languages. Two of the posture verbs of Toqabaqita will be relevant here: *qono* ‘sit’ and *teo* ‘lie’. The data come from my own field notes.

Qono can be used not only with the posture meaning ‘sit’ but also as an unmarked locative verb with human subjects. The location need not be specified

when it is obvious from context. Example (70) comes from a telephone conversation. The speaker is asking whether certain other people are present at the addressee's location:

- (70) Keki qono ba-da nena?
 3PL.IMPV sit LIM-3PL.PERS there
 'Are they there?'

In (71) the speaker responds to a question which was about where Mata was or what he was doing:

- (71) Mata kai qono ba-na.
 M. 3SG.IMPV sit LIM-3SG.PERS
 'Mata is [at home] (doing nothing in particular).'

The verb *teo* is used, besides signalling a lying posture, also as a locative/existential verb with inanimate subjects, sometimes with the additional meaning of 'be left at a place', 'be left over, remain'. While in the next example the object in question is likely to be in a lying position, the orientation is not relevant. What is important is that it is at a place:

- (72) A: Ma sofu baa? B: Teo ba-na.
 and soap that lie LIM-3SG.PERS
 A: 'And (where is) the soap? B: 'It's there (where it usually is).'

And one cannot meaningfully speak of a postural orientation of the subject referents in the next two examples:

- (73) Raa qeri qe teo.
 work that 3SG.NONFUT lie
 'The work continues, is not over.'
- (74) Manta-ku e teo qa-ta sitoa.
 mind-1SG.PERS 3SG.NONFUT lie at-some store
 'My mind is (set) on (having, opening) a store.'

As will be seen in Section 4.3, Toqabaqita has two other locative/existential verbs that are, in fact, more common than both *qono* and *teo*.

3.7. Boumaa Fijian, Standard Fijian and Wayan (Fiji)

These three languages are very closely related, with Wayan being more distantly related to Boumaa and Standard Fijian than the latter two are to each other. There are some considerable similarities with respect to their posture verbs (although there are also some differences), and so they are best discussed together. The verbs

that will be relevant are those with the meanings 'sit', 'squat', 'stand' and 'lie'. One thing that makes the Fijian languages unusual is the fact that the verb 'squat' has undergone grammaticalization. While it is quite common for an Oceanic language to have a (monomorphemic) verb with the meaning 'squat', such verbs do not seem often to participate in the kinds of polysemies discussed here. Another thing that makes the Fijian languages different from all those discussed above is the fact that the forms when used grammatically are not verbs but rather some kind of particle.

3.7.1. *Boumaa Fijian*

In Boumaa the relevant verbs and their meanings, as identified by Dixon (1988), are *ti'o* 'reside, remain; sit; be (i.e. exist) at a place', *tuu* 'stand; be (i.e. exist) at a place (of tall things, e.g. trees, people)', *to'a* 'sit on the heels, squat; be (i.e. exist) at a place' and *noo* 'be lying down'. Dixon says specifically that *tuu* ('stand') is used locatively about tall things; however, it may also be used as an existential verb to express possession where the restriction to tall subject referents does not seem to apply; see example (75) below. It is not clear what the difference is between the locative uses of *ti'o* 'sit' and *to'a* 'squat'.

Both *ti'o* 'sit' and *tuu* 'stand' can be used in existential sentences to express possession, and in at least some cases either form is possible with the same subject, with a difference in meaning: "*tuu* refers to a state of permanent ownership, whereas *ti'o* can just indicate that one has a thing with one at the moment" (Dixon 1988:128). Both verbs occur in (75):

- (75) E tuu vei au e dua a pua'a; ia e sega ni ti'o
 3SG stand to 1SG 3SG one ART pig but 3SG not that sit
 vei au i na gauna yai, e ti'o mai vale.
 to 1SG in ART time this 3SG sit at house
 'I own a pig; but it isn't (here) with me now (Lit. at this time), it's at
 the house.' (Dixon 1988:128)

Dixon (*ibid.*) goes on to say, "The fact that *tuu* indicates permanent ownership, and *ti'o* a state of possession at the present time (not necessarily before or afterwards), accords well with their meanings as predicate modifiers . . .". The predicate modifiers will be discussed presently. The fact that *ti'o* expresses immediate "possession" when the entity in question is with the possessor suggests that its meaning is primarily locative (note that in (75) the subject of *ti'o* is definite) or existential, rather than truly possessive.

All four forms that can function as posture verbs can also express aspectual meanings, in which case they are formally "modifiers": modifiers occur inside predicates and modify the head. There are over thirty such modifiers; some of them come before and others after the head. All of the modifiers related to the posture verbs come after the head. As modifiers, they may carry their posture

meanings, but they can also “describe the temporal duration, etc, of the activity or state referred to by the predicate head” (Dixon 1988:76). *Ti'o* ('sit') indicates that something is “happening continuously during *this* period of time, but not necessarily before or afterwards” (*ibid.*, original italics):

- (76) 'Ua ni vacu-'i au ti'o.
don't that punch-TRANS 1SG sit
'Don't keep on punching me!' (Dixon 1988:77)

Tuu ('stand'), when functioning as a modifier, expresses “*either* be[ing] permanently in a condition; *or* something happen[ing] over an extended period (and [. . .] now finished)” (Dixon 1988:76, original italics):

- (77) E pu'u tuu o Jone.
3SG angry stand ART J.
'John was angry for a long time.' (Dixon 1988:77)

Something being the case over an extended period of time need not hold at reference time:

- (78) Au aa 'ila-a tuu mai Suva a ica'aca'a
1SG PAST know-TRANS stand at S. ART method.of.work
ni tara-vale.
ASSOCIAT build-house
'I used to know in Suva how to build a house (i.e. I had this knowledge when I lived in Suva but have now lost it).' (Dixon 1988:78)

Recall that as a verb *tuu* can express permanent possession, which accords well with its signification of permanent condition when functioning as a modifier, and that *ti'o* expresses immediate possession (or perhaps current location with the possessor), which fits well with its function of marking something happening continuously at the time of reference.

For the modifier *to'a* ('squat') Dixon gives the following meanings: “half-do, try to do, do on an interim basis; with adjectives: not fully, quite (neither at one pole nor at the other, e.g. neither good nor bad)” (p. 76) and “something is done on a temporary basis, or is done casually, or is half-completed, or is not a typical or satisfactory example of that type of activity” (p. 78), and with an adjective “not fully this property but not fully without it” (*ibid.*). Dixon suggests that these meanings are motivated by the lexical meaning: squatting is an “uncomfortable position” which “would only be maintained for a short time” (*ibid.*).

- (79) Dree to'a mada.
pull squat please
'Please pull it for a moment (give it a bit of a pull).' (Dixon 1988:79)

- (80) Au sa rai-ca to'a a manumanu.
 1SG ASP see-TRANS squat ART animal
 'I saw an animal (e.g. a bat in a tree).' (Dixon 1988:79)

As Dixon explains (*ibid.*), "to'a in [80] implies that the speaker just caught a glimpse of the animal".

Noo ('lie') is the least common of the four forms as a modifier (*ti'o* 'sit' being the commonest), and is more likely than the other three to carry a posture meaning in its modifier use. However, it can carry an aspectual meaning, "referring to something brought to a successful conclusion" (Dixon 1988:80). As the next example shows, *noo* may be used as a modifier with a verb whose meaning is inconsistent with lying:

- (81) Bau 'ada va'atotolo noo.
 MODIF run quickly lie
 'Try and run quicker (to win).' (Dixon 1988:80)

According to Dixon, in (81) *noo* has the significance of 'win the race'.

3.7.2. Standard Fijian

The discussion of the Standard Fijian forms is based primarily on Schütz (1985) and Milner (1972). The relevant forms are all cognates of their respective counterparts in Boumaa. The following definitions are taken from Capell (1973): *tiko* 'sit, remain, be in a place', *tū* 'stand, be in a place, of people and large objects', *toka* 'sit on the heels, squat; be placed, situated, of people and small objects', *koto* 'lie in a place, chiefly of persons', *nō* 'lie, of things'. (Dixon (1988) mentions *oto* as a synonym of Boumaa *noo* 'be lying down', but does not discuss it in the relevant context.)

The Standard Fijian forms appear to be able to function as semantically unmarked locative and existential verbs, although the distinctions among them are not completely clear. Capell (1973) provides no detail on the non-posture use of *tiko* 'sit', but Milner gives an example of *tiko* used existentially with a human subject and Schütz provides an example with an inanimate subject:

- (82) E tiko koyā e dua na tamata.
 3SG sit there 3SG one ART man
 'There is a man over there (in any bodily position).' (Milner 1972:29)
- (83) E tiko e sō na raiṣi?
 3SG sit 3SG some ART rice
 'Is there any rice?' (Schütz 1985:101)

Tū 'stand' also can be used with human and inanimate subjects:

- (84) E tū ko Samu mai Niu Siladi.
 3SG stand ART S. in N. Z.
 'Samu is in New Zealand (somewhere or other).' (Milner 1972:28)
- (85) E tū e dua na vuniniu mai Sērua.
 3SG stand 3SG one ART coconut.tree in S.
 'There is a coconut tree (somewhere) in Sērua.' (Milner 1972:28)

While Capell's gloss of *tū* suggests that it may apply to entities that can be thought of as being upright (people and large objects), Schütz (1985:101) says that it is used "as an existential similar to *tiko*, but indicating more permanent existence, and hence, not confined to the situation at hand" (cf. what Dixon says about Boumaa *tuu*; Section 3.7.1 above), while Milner (1972) says that "[*t*]*ū* makes no definite reference to place" (p. 28), and that "[w]hereas *tū* is indefinite, *tiko* is more definite. It implies that the location is known to the speaker and that he can give information about it." (p. 29).

As in Boumaa, the Standard Fijian forms can be used with aspectual functions, coming after the predicate head. In this function they are considered "particles" (Milner 1972) or "markers" (Schütz 1985), not verbs. According to Schütz, all of the forms mark the "continuative" aspect (see further below for the appropriateness of the term "continuative"), *tiko* and *tū* being the most common ones, while the other three are rare. Schütz (1985:294) states that *tiko* ('sit') marks "temporary duration"; according to Milner (1972:29), it "restrict[s] the validity of an utterance to a limited period of time". It can be used with both action and state verbs; that is, it marks continuous aspect, in the terminology of Bybee *et al.* (1994). As the first example shows, *tiko* can be used as an aspect marker with a verb whose meaning is inconsistent with the posture meaning of *tiko*:

- (86) Erāū lako tiko ki na itēitēi.
 3DU go sit to⁵ ART garden
 'They are going to the garden.' (Schütz 1985:346)
- (87) E cā tiko na no-na vale.
 3SG bad/damaged sit ART POSS-3SG house
 'His house is damaged (for the time being).' (Milner 1972:29)

Tū ('stand'), as a particle, "mak[es] an utterance *indefinite* as to time or place" (Milner 1972:29; original italics). Unlike *tiko*, *tū* does not restrict the validity of an utterance to the time of reference. It too can be used with both action and state verbs:

- (88) A cava e sā bāū tuku-n-a tū na no-na vūniwāi?
 ART what? 3SG ASP TEN tell-TRANS-3SG stand ART POSS-3SG doctor
 'What does her doctor say?' (Said in the context of a serious disease with no signs of improvement.) (Schütz 1985:295)

- (89) E cā tū na no-na vale.
 3SG bad/damaged stand ART POSS-3SG house
 ‘His house is damaged (for an indefinite period).’ (Milner 1972:29)

Compare the last example, where *tū* marks an indefinite period of time, and the parallel sentence in (87) further above, where *tiko* restricts the validity of the sentence to the time of speaking.

Toka (‘squat’) is characterized in its particle use by Schütz (1985:295) thus: it “indicates a provisional, rather unfixed, approximate duration of an action or uncertain quality of a state”. Milner (1972:91) says about the particle *toka* that it “means that something is done for a period, provisionally, fairly, passably well. It indicates a less formal way of speaking than *tiko*”. (Cf. Dixon’s (1988) characterizations of Boumaa *to’a* in Section 3.7.1.)

- (90) Au ā vina-kat-a me-u vakarau toka.
 1SG PAST want-TRANS-3SG SUBJ⁶-1SG ready squat
 ‘I want to be more or less ready.’ (Milner 1972:91)
- (91) Ratōū vēī-lewā-tak-a toka . . .
 3PAUC REC-discuss-TRANS-3SG squat
 ‘They “discussed around” (for an indeterminate length of time) (and prayed that a heavenly decision would come.’ (Schütz 1985:296)
- (92) rau-t-a vitu toka
 suffice-TRANS-3SG seven squat
 ‘about seven’ (Schütz 1985:296)

Schütz (1985:296) provides the following triplet of examples to show the differences between *tiko*, *tū* and *toka*:

- (93) Sā vinaka tiko.
 ASP good sit
 ‘It’s good (for the time being, until something better comes along).’
- (94) Sā vinaka tū.
 ASP good stand
 ‘It’s definitely good (on a permanent basis).’
- (95) Sā vinaka toka.
 ASP good squat
 ‘It is fairly good.’

Dixon (1988) says that the grammatical uses of Boumaa *to’a* (‘squat’) are motivated by the lexical meaning: the verb refers to a posture that is uncomfortable and so is normally maintained only for a short time (see above in Section 3.7.1).

Milner (1972:91, n. 8) has this to say about squatting: “This is *not* a normal way for a Fijian to sit except out of doors when the ground is too wet to sit down. As squatting shows lack of respect for a chief, people try to squat so as to avoid notice, i.e. at the back or behind trees [original italics].” It is most likely this connotation of inappropriateness that underlies the use of *toka* to imply that something is done only fairly or passably well.

On the other hand, Schütz (1985:296) says that according to personal information from Paul Geraghty *toka* “sometimes seems to imply that an action was done ‘easily, quietly, casually, or without strain’”:

- (96) Kana toka.
eat squat
‘Carry on eating at your leisure.’ (Schütz 1985:296)

Toka can be used with verbs of motion:

- (97) E yabe toka.
3SG walk.about.without.carrying.anything squat
‘She was strolling along.’ (Schütz 1985:296)

As a particle, ‘squat’ seems to be capable of expressing a variety of meanings. While Dixon views squatting as an uncomfortable position, which is what, according to him, motivates the grammatical uses of Boumaa *to’a*, in Standard Fijian the etymon may carry a somewhat different meaning of ‘easily, without strain’, which is most likely motivated by its function of indicating that an action is performed only passably well.

Koto (‘lie’), when used as a particle, signifies that “something has/is or will come to a standstill, has reached or will reach its conclusion” (Milner 1972:91):

- (98) Kē vakā me de-i koto gā na yavu ni i-Taukei, . . .
SUBJ like.it SUBJ fix-TRANS lie LIM ART foundation POSS owners
‘If a foundation for the Fijians (Lit. owners) is to be firmly fixed, . . .’
(Schütz 1985:297)

Schütz (1985:297) suggests that *koto* is also used to indicate a “continuing state”, but in the only example he gives *koto* is also interpretable as signifying a lying posture.

There is another verb whose meaning is ‘lie’, *nō* (cf. Boumaa *noo* above), about which Milner (1972) says that it is synonymous with *koto*, while Schütz (1985) says that it is used as a particle only after *koto* as the predicate head:

- (99) E koto nō.
3SG lie lie
‘She was lying down.’ (Schütz 1985:297)

Schütz says that all the particles with posture-meaning counterparts mark “continuative” aspect; however, his “continuative” category in some cases corresponds more closely to Bybee *et al.*’s (1994) “continuous”, and in some others neither “continuative” nor “continuous” is appropriate, as with *koto* signifying coming to a standstill or reaching a conclusion.

3.7.3. *Wayan*

The Wayan data come from Pawley and Sayaba (forthcoming). The relevant verbs are *nō* ‘sit, be seated’, *tū* ‘stand, be erect’, and *doki* ‘lie down, recline’. Note that Wayan *nō* means ‘sit’, while its cognates in Boumaa and Standard Fijian have the meaning ‘lie’. All three Wayan verbs can be used with locative and existential meanings, and *nō* and *tū* can also have aspectual functions. Besides ‘sit, be seated’ the lexical meanings given for *nō* by Pawley and Sayaba are ‘stay, dwell, occupy, live or settle in a place’ and for the reduplicated form *nōnō* ‘stay, sit (two or more people)’, ‘(with animate subjects) live, exist, be’.

- (100) Aru *nō-nō* vali *kā* aru rua na gwadi.
 3DU.PAST sit-RED PART there 3DU.PAST be.two ART friend
 ‘Once upon a time there were two friends.’ (Pawley and Sayaba, forthcoming, *nō*₁ entry)

Nō is also used as a postverbal particle with a continuous-aspect marking function: it “[m]arks the action or state of the verb as continuing or persisting, unfinished” (Pawley and Sayaba, forthcoming, *nō*₂ entry):

- (101) Na ava e kwase-taki *nō*?
 ART what? 2SG.NONPAST shout-TRANS sit
 ‘What are you shouting about?’ (Pawley and Sayaba, forthcoming, *nō*₂ entry)
- (102) Sā kuya *nō* na rāraci?
 ASP be.how? sit ART patient
 ‘How is the patient?’ (Pawley and Sayaba, forthcoming, *nō*₂ entry)

The particle *nō* can also mark “continuing a state or process in moderate degree” (Pawley and Sayaba, forthcoming, *nō*₂ entry), which is reminiscent of the function of Boumaa *to’a* and Standard Fijian *toka* (‘squat’). Compare the Wayan example (103) below and the Standard Fijian example (95) further above:

- (103) Sā vinā *nō*.
 ASP be.good sit
 ‘It’s fairly good.’ Also ‘It is still good.’ (Pawley and Sayaba, forthcoming, *nō*₂ entry)

Finally, as a particle *nō* can also indicate “persistence in an activity: keep (do)-ing”:

- (104) Teva vītalanoa nō rē.
 1PAUC(INCL) chat sit POLITE
 ‘Let’s go on chatting together.’ (Pawley and Sayaba, forthcoming, *nō*₂ entry)

Tū (‘stand’) also can function as a postverbal particle with continuous-aspect marking functions: “indicating continuity or persistence of an action or state”, “permanent or established state or position” and “continuing process of indefinite duration, but not expected to last” (Pawley and Sayaba, forthcoming, *tū*₃ entry). Compared to *nō*, *tū* implies relatively long duration. Compare (105), where *tū* functions as a postverbal particle signalling permanence with the verb *nō*, and (106), which contains *nō* without *tū*, which expresses a temporary location. As (105) also shows, as a particle *tū* can combine with a verb that encodes a posture other than standing.

- (105) Ei nō tū i Suva.
 3SG.NONPAST sit stand in S.
 ‘He lives in Suva.’ (It is his permanent home.) (Pawley and Sayaba, forthcoming, *tū*₃ entry)

- (106) Ei nō vali i Suva.
 3SG.NONPAST sit PART in S.
 ‘He is staying in Suva.’ (He is a visitor there, he’s there for the time being.) (Pawley and Sayaba, forthcoming, *tū*₃ entry)

Compare also the next example with the particle *tū*, where an extended state is being inquired about, and (102) further above with the particle *nō*, which asks about a patient’s current state:

- (107) Sā kuya tū mai na cola kāē?
 ASP be.how? stand at.there ART life there
 ‘How is life over there?’ (Pawley and Sayaba, forthcoming, *tū*₃ entry)

The particle *tū* is also used to signal “a stable condition” (Pawley and Sayaba, forthcoming, *tū*₃ entry). Most of the examples Pawley and Sayaba give suggest a function not unlike that of Boumaa *noo* (‘lie’) “referring to something brought to a successful conclusion” (Dixon 1988:80) and Standard Fijian *koto* (‘lie’) “something has/is or will come to a standstill, has reached or will reach its conclusion” (Milner 1972:91).

- (108) Sā buta tū na raisi.
 ASP be.fully.cooked stand ART rice
 ‘The rice is cooked (and ready).’ (Pawley and Sayaba, forthcoming, *tū*₃ entry)

The third posture verb ‘lie down, recline’ can also be used with a locative significance, although its exact meaning in the only example given is not clear:

- (109) Laka tola-vī Mōmō ei nō doki sōkeni.
 go see-TRANS chief 3SG.NONPAST sit lie there
 ‘Go see if the Chief is there.’ (Pawley and Sayaba, forthcoming, doki
 entry)

3.8. Other languages with posture-locative/existential polysemies

There are many other Oceanic languages with verbs that carry both posture and locative/existential meanings but for which no grammatical uses are noted in the sources or the information is extremely sketchy. They are mentioned here because they fit a larger pattern which will be discussed in Section 5.

In Lakalai (Papua New Guinea) we find the following polysemy: ‘sit, sit down, sit up (of a baby)’, ‘be situated, of persons’, ‘stay’, ‘be’, and also ‘wait’, ‘remain’, ‘live (in a certain village)’ (Chowning and Goodenough 1991). Gitua (Papua New Guinea) has a verb ‘sit, live at’, which can also be used locatively and existentially with human subjects; and it has a verb ‘lie; sleep’, which is also used as a locative verb with inanimate subjects (Lincoln 1977, n.d.). In Gedaged (Papua New Guinea) one and the same verb has the meaning ‘lie’ and is also used as a location verb with inanimate subjects (Dempwolff n.d.). (With human subjects the verb ‘stay, remain’ is used locatively.) Tolo (Solomon Islands) has a verb with these meanings: ‘sit (down); reside, live; remain, stay; be (at a place)’ (S. Crowley 1986).

4. Locative/existential verbs without posture meanings

In many Oceanic languages one finds verbs that can be used with locative and/or existential meanings but that do not have posture meanings, but those etyma also have grammatical functions not unlike those discussed above. The focus of the present study is on posture verbs, and therefore the other types of verb will be discussed here only briefly; nevertheless, they are relevant to our understanding of the developments involving posture verbs.

4.1. Araki (Vanuatu)

The data on Araki come from Alexandre François (pers. comm., September 2000). Araki has a verb *roho*, which François glosses ‘stay, dwell’. It is used locatively in (110):

- (110) Nam roho Vila.
 1SG.REAL stay V.
 ‘I live in Vila.’ (i.e., my personal house is there.)

Besides the verb *roho* Araki also has a particle *ro*, which is historically a reduced form of *roho*. *Ro* has two functions. One of them is “suggestive”: *ro* expresses suggestions or polite requests directed at others or showing politely one’s own intentions. It is the other function that is relevant here, in which *ro* marks the continuous aspect: events in progress and states continuing at the time of reference. Compare (110) immediately above, which is about a long-term location, and (111) below, with *ro*, where the location is temporary, current. As (111) shows, the particle *ro* may occur with the verb *roho*:

- (111) Nam roho ro Vila.
 1SG.REAL stay stay V.
 ‘I am staying in Vila.’ ‘I am now in Vila.’

In (112) what is being encoded is a continuing state:

- (112) . . . pani mo vidiha ro!
 but 3SG.REAL black stay
 ‘[I told you to wash your hands,] but they are still black!’

Araki *roho* is cognate with Boumaa *to’a* ‘squat’ and Standard Fijian *toka* ‘squat’ (Sections 3.7.1 and 3.7.2, respectively). However, evidence from languages much more closely related to Araki than the Fijian languages are shows that in the history of *roho* the earlier meaning was ‘sit’. Codrington and Palmer (1896) say in their dictionary of Mota that Mota *toga* ‘abide, dwell, endure, live, behave, be’ originally had the meaning ‘sit’, as was still the case in the Motlav language. François (pers. comm.) gives the meanings of Motlav *tog* as ‘live (somewhere), dwell’, ‘have one’s usual place’, ‘stay in a place for at least several days’, ‘have such and such usual habits, hence have such and such a behavior/way of life’; while the meaning ‘sit’ is now carried by a different verb. Araki *roho* does, then, have a historical association with the meaning ‘sit’, and the particle that derives from it expresses the continuous aspect. As discussed in Section 3, several other languages show connections between the meaning ‘sit’ and the continuous or progressive aspects.

4.2. Loniü (Papua New Guinea)

As discussed in 3.5, Loniü verbs ‘sit’ and ‘stand’ are used as “auxiliaries” to signal the relative length of the event encoded by the following verb, the former marking relatively long and the latter relatively short duration. Loniü also has a locative

verb *t(w)* ‘be in a place; stay, remain, live’, which can be used with animate as well as inanimate subjects:

- (113) Hetow tɔ pah pɛʔɛsih hetow tɔ pah pɛʔɛsih
 3PAUC be.in.place market time.one 3PAUC be.in.place market time.one
 hetow tɔ pah . . . pɛʔɛsih ɛ pɛʔɛsih . . .
 3PAUC be.in.place market time.one and time.one
 ‘They were at the market for several days, day after day they were there
 . . .’ (Hamel 1994:270)
- (114) Iy ičɛləp*ɛni ɛpi itɔw.
 3SG 3SG.lose sago 3SG.stay
 ‘He dropped the sago (and left it there) (Lit. it stayed).’ (Hamel
 1994:118)

The form *t* (but not *tɔw*) is also used with an imperfective-aspect function: it may indicate an event in progress, a continuing state, or a habitual, general event. It precedes the verb whose aspects it marks in what appears to be a serial verb construction (although Hamel calls it an “auxiliary” function):

- (115) Yo utɔ mete.
 1SG 1SG.stay sleep
 ‘I am/was sleeping.’ (Hamel 1994:107)
- (116) Palan a tɔ ɲeti.
 head.3SG still stay hurt
 ‘His head is still hurting.’ (Hamel 1994:107)
- (117) Pew itɔ ɲeni amat.
 shark 3SG.stay eat human
 ‘Sharks eat people.’ (Hamel 1994:110)

4.3. Toqabaqita (Solomon Islands)

Data from Toqabaqita were discussed in Section 3.6, where it was shown that the verbs *qono* ‘sit’ and *eno* ‘lie’ can be used with locative/existential significance. Toqabaqita also has two locative/existential verbs which do not signify posture: *nii* ‘be located’, which implies relatively short-term presence at a location, and *too* ‘be located; stay, dwell’, which implies relatively long-term or permanent presence at a location. The distinction between them is shown in (118) and (119) (both verbs occur in their fusing forms):

- (118) Nia e ni-i Qaaqama.
 3SG 3SG.NONFUT be.located-at Q.
 ‘He is (now, visiting, temporarily) at Qaaqama (Village).’

- (119) Nia e to-i Qaaqama.
 3SG 3SG.NONFUT stay/dwell-at Q.
 ‘He stays/lives at Qaaqama.’ (That’s where his home is.)

Too is also used with an aspectual significance to express the fact that a situation continues, persists for a long time. In this function *too* forms the predicate of its own clause. Its subject marker is always third-person singular sequential, regardless of the subject of the preceding clause. That is, in the aspectual function *too* occurs in ambient coordination. Recall from Section 3.1 that this is also the case with the Manam verb *eno* ‘lie’ when it marks continued, persistent events. When Toqabaqita *too* is used aspectually, it is followed by the limiting particle *ba-*, which takes the third-person singular personal suffix *-na* (because the subject marker is third-person singular).

- (120) Nau ku mataqi ka too ba-na.
 1SG 1SG.NONFUT be.sick 3SG.SEQ stay LIM-3SG.PERS
 ‘I am always sick.’ ‘I’ve been sick for a long time.’

To emphasize the long temporal extent of an event, the verb *too* may be reduplicated. (Reduplication of verbs is another way to express temporal extendedness of events.)

- (121) Wela e fita keeketo ka too-too ba-na.
 child 3SG.NONFUT run all.about 3SG.SEQ stay-RED LIM-3SG.PERS
 ‘The child keeps running all about all the time.’

It is noteworthy that of the two locative/existential verbs it is the one that implies relatively long presence at a location that is used aspectually to express continuation of, persistence in, an event.

4.4. Melanesian Pidgin

Forms that carry locative/existential meanings and that are also used with grammatical functions are found not only in indigenous languages but also in two varieties of Melanesian Pidgin, Tok Pisin (Papua New Guinea) and Bislama (Vanuatu). (The third variety of Melanesian Pidgin, Solomon Islands Pijin, has only locative/existential meanings of the etymon in question.) The relevant form is *stap*, which comes from English *stop*. Tok Pisin data will be considered first. For the verbal uses of Tok Pisin *stap* Dutton (1985a) gives the following meanings: ‘be, exist, remain, live’, while Verhaar (1995) says that *stap* also functions as a copulative verb. Example (122) illustrates the locative use of *stap*:

- (122) Pikinini i stap we?
 child PRED be where
 ‘Where is the child?’ (Dutton 1985a: 18)

The sentence in (123) is existential:

- (123) Wānpela man i stap, nem bilong en Josep.
 one man PRED exist name POSS 3SG J.
 ‘There was a man named Joseph.’ (Verhaar 1995:93)

And (124) illustrates copulative usage:

- (124) Em i stap Praitim Minista.
 3SG PRED COP P. M.
 ‘He is the Prime Minister.’ (Verhaar 1995:82)

Stap also has a grammatical function, in which case it occurs in a serial verb construction. According to Verhaar (1995), it marks the progressive aspect, although some of the examples he gives show that it marks the continuous aspect with states as well. Dutton (1985a:115) says that *stap* “indicates that the action is in progress or is continuing [footnote omitted] at the time referred to [footnote omitted]”. In the grammatical function, *stap* normally occurs after the verb whose aspect it marks, and it has its own predicate marker:

- (125) Ol i kaikai i stap.
 3PL PRED eat PRED be
 ‘They are eating.’ (Verhaar 1995:107)
- (126) Hamas de pikinini i sik i stap?
 how.many? day child PRED be.sick PRED be
 ‘How many days has the child been ill?’ (Verhaar 1995:108)

It is possible for aspect-marking *stap* to precede, rather than follow, the event-encoding verb, although this type of construction is, apparently, rare:

- (127) Yu stap mekim wanem samting?
 2SG be do what? something
 ‘What are you doing?’ (Verhaar 1995:114)

The next set of examples are from Bislama. T. Crowley (1995) gives the following existential/locative glosses for *stap*: ‘exist’, ‘be there, be in’. *Stap* also marks the imperfective aspect: ongoing and habitual events. Unlike in Tok Pisin, in Bislama *stap* always precedes the verb whose aspect it marks:

- (128) Oli stap plei yet long Freswota?
 PRED.PL be.there play.soccer still at F.
 ‘Are they still playing football at Freshwater?’ (Crowley 1995:187)
- (129) Mi no stap smok.
 1SG NEG be.there smoke
 ‘I don’t smoke.’ (Crowley 1995:231)

- (130) *Apel i stap lukaot sipsip.*
 A. PRED.SG be.there guard sheep
 ‘Abel gardait (était en train de ou avait pour occupation de garder) les moutons.’ (Guy 1974:72)

Given the fact that in Tok Pisin aspectual *stap* (normally) follows the verb whose aspect it marks and in Bislama it precedes it, the grammatical uses of *stap* in the two languages are likely to be the result of independent developments.

4.5. Hiri Motu (Papua New Guinea)

Hiri Motu is a creole language which is a historical continuation of a trading language that was a simplified version of the indigenous Motu language (Dutton 1985b). Hiri Motu has a locative/existential verb *noho* ‘be, exist, be present’ (Dutton and Voorhoeve 1974). Hiri Motu *noho* has “cognates” in other languages with the meaning ‘sit’ and locative/existential meanings, specifically Polynesian languages. For true (non-creole) Motu Lister-Turner and Clark (n.d. 1) give *noho* ‘live, dwell’, but Lister-Turner and Clark (n.d. 2) list the expression *nohokiri* *nohokiri* ‘sit together with laughter’ (*kiri* ‘laugh’). Example (131) contains *noho* used existentially:

- (131) *Gatoi hida idia noho?*
 egg how.many? 3PL exist
 ‘How many eggs are there?’ (Dutton and Voorhoeve 1974:57)

Noho can also be used after another verb to signify that the event encoded by that verb “is still in progress or is continuing at the time referred to [footnote omitted], or that the action occurs over a period of time” (Dutton and Voorhoeve 1974:91):

- (132) *Laegu kakana be kopina ia kokia noho.*
 my older.sibling.same.sex FOC skin 3SG remove exist
 ‘My elder brother is still skinning them/it.’ (Dutton and Voorhoeve 1974:92)
- (133) *Hua toi idia raka mai noho.*
 month three 3PL walk come exist
 ‘They walked for three months.’ (Dutton and Voorhoeve 1974:92)

4.6. Other languages

There are other languages for which aspectual or aspect-like uses of locative/existential verbs are given in the descriptions of the languages, without much or

any additional detail. In Mangap-Mbula (Papua New Guinea) the locative/existential verb ‘stay, live, exist, be at’ is also used to mark what Bugenhagen (1995) refers to as the “continuative” aspect:

- (134) Ni i-kamam uraata ma i-mbotmbot.
 NOM.3SG 3SG-do.RED work and 3SG-stay.RED
 ‘He continued to work.’ (Not: *‘He did the work and afterwards stayed around.’) (Bugenhagen 1995:282)

Note that the event verb and the aspect-marking verb ‘stay’ occur in two separate, coordinated clauses.

In Labu (Papua New Guinea) the locative verb ‘stay’ is used as a second verb in a serial verb construction to express the “durative”:

- (135) Êmalu mê-êlê mê-nda.
 1DU(EXCL) 1PL(EXCL)-search 1PL(EXCL)-stay
 ‘We were searching for it.’ (Siegel 1984:115)
- (136) Êsôha sô-kô gwà sê-nda ame pêsê.
 3PL 3PL-make canoe 3PL-stay until night
 ‘They were making the canoe until night.’ (Siegel 1984:115)

In Tinrin (New Caledonia), the locative/existential verb ‘stay, exist’ is also used before another verb to indicate the “durative”, “continuous”, “progressive” aspect:

- (137) Nrà truu fwirri musik.
 3SG stay listen music
 ‘He is listening to music.’ (Osumi 1995:186)

And in Erromangan (Vanuatu) a form which can be a verb meaning ‘stay, live’ can also function as an auxiliary with the meaning of “habitual, continuous” (T. Crowley 1998).

5. Summary and discussion

In Section 3 we saw examples from various Oceanic languages of two kinds of semantic networks in which verbs of posture participate. In one, they are polysemous verbs with other lexical meanings besides signifying a posture. In the other, the etyma are also used with some grammatical — most often aspectual — functions. And in Section 4 we saw that there are languages that have verbs, which do not signify a posture but have other meanings that are like those found in the lexical polysemies involving posture verbs. Furthermore, those same verbs have grammatical functions that are like those found with some verbs that do have

posture meanings. Before discussing the various meanings and functions in some detail, we will take a brief look at the formal properties of the forms that have grammatical functions, the main focus being on the etyma that also function as posture verbs.

5.1. Formal properties of grammatical forms related to etyma with posture meanings

On the basis of their morphosyntactic properties, three main types of the relevant elements and associated syntactic constructions can be distinguished. In some languages the forms, when used with grammatical functions, are formally particles that accompany verbs. This is the case in the Fijian languages (Section 3.7). There is a consensus among the students of the Fijian languages that when used grammatically, the forms are not verbs; instead, they are particles of some sort (the terms “modifiers” and “markers” are also used). In other languages, the relevant forms, when used aspectually, are verbs. In some languages they participate in serial verb constructions and function as modifiers of the other verb(s). This is the case in, for example, Numbami (Section 3.2) and Lewo (Section 3.3). And in still other languages the forms in question are the heads of their own predicates; they occur in their own clauses which are coordinated with the clauses whose aspect they mark. This is the case in Manam (Section 3.1).

All three types are also found in languages in which the etyma in question do not have posture meanings: Araki has a particle (Section 4.1); Loniū appears to employ serialization (Section 4.2); and Toqabaqita has coordination (Section 4.3).

As far as serialization and coordination are concerned, one finds same-subject constructions and ambient constructions, even in the same language: Numbami has both same-subject and ambient serialization, and Manam has both same-subject and ambient coordination.

While it is possible — although there is no direct evidence to that effect — that the particle construction is a later development from verb serialization, the existence of coordinate constructions with aspectual functions demonstrates that serialization is not necessary for a grammatical function to develop: such verbs head the predicates in their own clauses, and they take their own subject markers. At the same time, however, there are some restrictions on them as verbs: their subject markers must be the same as that of the verb whose aspect they mark (same-subject coordination), or it must be third person singular (ambient coordination). Another restriction on aspect-marking coordination is that such clauses allow only minimal elaboration beyond the verb, usually some kind of subject marking and perhaps a certain particle. And, by definition, such clauses do not encode (separate) events. Such constructions have some, but not all, properties of clauses in those languages.

As far as linear ordering is concerned, there is, overall, clear preference for the aspect-marking form or construction to follow the verb or clause whose aspect it marks. No languages have been found where what is clearly a particle precedes the verb whose aspect it marks; similarly, no languages have been found where in a coordinating construction the aspect-marking clause precedes the clause whose aspect it marks. When it comes to serialization, the order [event-verb aspect-verb] is cross-linguistically more common than the reverse.

One type of structure that is found in many languages around the world to express a situation's obtaining at reference time is a locative structure of the type ['be at/in' verbal-noun] (in either order) (see, for example, Bybee *et al.* 1994). This structure does not seem to occur in Oceanic; or if it does, it must be rare. Instead, in Oceanic one finds locative etyma in serial verb constructions, in clausal coordination, or as particles accompanying verbs.

5.2. Lexical polysemies

In a number of Oceanic languages verbs that carry posture meanings also function as semantically unmarked locative and existential verbs, that is as verbs used to encode the location or existence of an entity, without any necessary implication of posture or spatial orientation. Normally, there are some restrictions on the locative/existential uses of such verbs in terms of the animacy of the subject. Verbs that carry the posture meaning 'sit' are typically restricted to human or higher-animate subjects, while verbs that carry the posture meaning 'lie' are typically restricted to other types of subject, inanimates or inanimates and non-higher animates. In most such languages, the verb 'stand' does not function as a semantically unmarked locative/existential verb, but it does appear so to function in (Standard) Fijian. The Fijian languages are also exceptional in that the posture verb 'squat' participates in a polysemy.

It is not difficult to see why the verb 'sit' should, in its locative/existential uses, be restricted to human/higher-animate subjects, because only humans and (some) higher animates can assume a sitting position, the category of non-human higher animates being very restricted in the geographic area in which the Oceanic languages are found. And since the verb 'stand' in most languages implies extended vertical orientation, the verb 'lie' is, by default, extended to all types of subject where neither 'sit' nor 'stand' are appropriate. Thus in Manam (Section 3.1) the verb 'lie' is used in locative and existential sentences where there is no posture or spatial orientation at all, such as with abstract subjects: 'If there is work, I'll help you' (example 28).

'Sit' verbs often carry other meanings, commonly 'dwell, reside, live (at a place)'. With these meanings the verbs are normally used only with human subjects. This restriction also is related to the fact that the sitting posture is most characteristic of humans.

Somewhat different polysemies involving posture verbs are found in some other languages, where the meanings are quasi-aspectual: the verbs carry some signification of extendedness in time. The relevant verbs are used by themselves, rather than modifying other verbs, and they contrast with each other as locative/existential verbs signifying different relative lengths of time of location or existence. Here too some patterns are discernible which can be related to the posture meanings. In Tamambo (Section 3.4), 'stand' denotes relatively short periods of time, 'lie' relatively long periods of time, and 'sit' falls in between. In Lewo (Section 3.3) 'sit' indicates temporary, short duration, while 'lie' indicates extended or permanent duration. 'Stand' is said to indicate general existence. And in Loniū 'sit' implies longer duration relative to 'stand' (although 'stand' usually implies standing position as well). For these languages the pattern then is as follows: 'stand', when it does signify temporal extendedness, implies shorter periods of time than 'sit', which, in turn, implies shorter periods of time than 'lie'. However, the Fijian languages do not fit this pattern, because there 'stand' implies more permanence relative to 'sit' (Section 3.7) (the 'lie' forms do not signify extendedness in time). There is also some tendency for verbs 'stand' to indicate more general, less specific location or existence, compared to 'sit' and 'lie'. This is the case in Fijian and also in Lewo. The motivation for this is not obvious, but it may be that this is what verbs 'stand' really signify rather than, as has been suggested for the Fijian languages, longer periods of times relative to 'sit'. Unfortunately the detail of the information available on these languages is not sufficient to resolve the problem.

Combining the data from these languages we can then postulate the following mini-hierarchy concerning extendedness in time: 'stand'/'sit' — 'lie', where 'lie' signifies the longest extendedness relative to 'stand' and 'sit'. As far as the latter two are concerned, in some languages 'stand' signifies shorter extendedness than 'sit' while in other languages the opposite is, or may be, the case. However, as mentioned at the end of the preceding paragraph, there is some uncertainty about the exact temporal significance of the verbs 'stand' in some languages. There is support for the 'stand'/'sit' — 'lie' hierarchy from the grammatical uses of the forms that carry posture meanings to be discussed in the next section: basically, verbs 'lie' are in some languages used to express continuative aspect, which is characterized by relatively long temporal extendedness, while the forms 'sit' are used aspectually primarily to express the progressive and continuous aspects, which in their prototypical uses relate specifically to reference time and so are temporally restricted.

In cases of lexical polysemy, can we tell, in the absence of direct historical evidence, whether the posture meanings were historically primary with the other meaning(s) developing later, or were the posture meanings later developments from the non-posture meanings? The available evidence suggests that it was the

posture meanings that were historically primary. First, recall that some languages have animacy restrictions on the subjects of the locative/existential verbs. The locative/existential verbs that also carry the meaning 'sit' are restricted to human or higher-animate subjects. This restriction is readily understandable on the assumption that the posture meaning 'sit' was the historically primary one: the sitting posture is characteristic of humans. Second, verbs that mean 'sit' also carry the meanings 'dwell, reside, live (at a place)', which are normally applied only to humans. On the other hand, verbs which have the meaning 'lie', among others, are typically used as locative/existential verbs with subjects that are not human or higher-animate and whose referents are not characterized by an extended vertical posture. If we assumed that the non-posture meanings were historically primary, we would have to assume an earlier unmotivated contrast between two locative/existential verbs one of which applied only to human/higher-animate subjects and the other to all other subjects whose referents were not vertically extended. Verbs of the first type would later develop the meaning 'sit' and verbs of the second type the meaning 'lie'. On the other hand, if we assume that such verbs originally had posture meanings, the contrast between the two types of locative/existential verbs finds a ready explanation. Because 'sit' verbs were used prototypically with human and possibly other higher-animate subjects, when they developed locative/existential uses, they were restricted to occurring with human and possibly other higher-animate subjects. And since 'lie' verbs were used to specify the "posture" not only of human but also a large variety of non-human, especially inanimate, subjects, when they developed locative/existential uses they were not used with human and possibly other-higher animate subjects, because the verb 'sit' was better motivated there.

The other piece of evidence of the historical primacy of the posture meanings comes from languages where such verbs also carry an implication of relative extendedness in time. There is a pattern whereby verbs 'lie' imply relatively longer periods of time than verbs 'sit' and 'stand'. As discussed by Newman (this volume, p. 2), of the three postures lying requires the least sensorimotor control and so can be easily maintained for relatively long periods of time. Sitting and, especially, standing require more sensorimotor control than lying, and so those postures will normally be maintained for relatively shorter periods of time. Foley (1986) says that the types of situation encoded by verbs 'sit', 'stand' and 'lie', as well as 'stay' and 'be at' are inherently durational, which makes them eligible for expression of extended aspect. However, the three postures of sitting, standing, and lying are not durational to the same extent, lying being more durational than sitting and standing. It is these physiological aspects of the postures that (partially) motivate the development of the relative degrees of extendedness-in-time meanings of the corresponding verbs. (The motivation appears only partial because a verb 'stand' may, it seems, signify longer extendedness in time than a verb 'sit', even though

standing requires more sensorimotor control than sitting.) Note that it is not part of the meanings of the verbs that the corresponding postures require different degrees of sensorimotor control and so that the lying posture on the one hand and the standing and sitting postures on the other can be normally maintained for relatively different lengths of time. These notions are more like what Fauconnier (1999) calls “backstage cognition”. It is the relative degrees of length of time with which the different postures are normally maintained that motivate — via metonymy — the development of the meanings of relatively short or long extendedness in time. Were one to assume that the posture meanings were later developments, one would have to assume that earlier there was an apparently unmotivated contrast between verbs in terms of signifying different degrees of temporal extendedness. On the other hand, such contrasts are readily explainable on the assumption that they are developments from the posture meanings. And, if this scenario is historically accurate, the case of the posture verbs demonstrates that it may be such backstage cognitive factors rather than what might be considered parts of the meaning proper of a lexeme that motivate its semantic extension(s).

5.3. Grammatical uses of posture etyma

In a number of languages, etyma that carry posture meanings are also used with grammatical functions, often, though not always, marking some kind of aspect, characterizing in some respects the situation encoded by the verb with which they occur in some kind of construction (as a particle accompanying a verb, in verb serialization or in clause coordination). And here too some patterns can be discerned, and here too the posture uses of the forms are the motivating factors. Although there is considerable variation in the terms used in the grammatical descriptions for the aspects in question, the notions that recur can be characterized as “progressive” (sometimes with an implication of some temporal extent), “continuous”, “durative”, “imperfective” (progressive and habitual) and “continuative”/“persistent”. ‘Sit’ forms mark the progressive and continuous aspects, while ‘lie’ forms tends to signal the continuative aspect or some other extendedness in time.

In Manam both ‘sit’ and ‘lie’ are used aspectually (in clause coordination). ‘Sit’ marks the progressive aspect, sometimes with an implication of some temporal extent, while ‘lie’ marks the continuative/persistent aspect. This is fully consistent with the notion of lying being a posture that is normally maintained for longer periods of time than sitting, as discussed in the preceding section. In Numbami ‘sit’ is used with a “durative” function (‘lie’ does not have an aspectual function; but see further below for a different function of Numbami ‘lie’). In Manam ‘sit’ marks primarily an action in progress, not duration; the construction

is used only when the subject of the event-verb is higher-animate; and it cannot be used if the event encoded by that verb is inconsistent with sitting. In Numbami, on the other hand, 'sit' marks the durative aspect (the event need not be in progress at reference time); it can be used even when the subject of the event verb is inanimate; and the event-verb may be a posture verb other than 'sit'. One possible interpretation of the Manam and Numbami facts is that the Numbami verb 'sit' has progressed further along a grammaticalization channel than its Manam counterpart. There is also a structural correlate: in Manam the construction involved is clause coordination while in Numbami it is verb serialization. That is, the Manam looser syntactic construction is associated with more severe semantic restrictions in terms of the animacy of the subject of the event-verb and the kind of event involved than the Numbami syntactically tighter construction is. This too is consistent with the idea that Manam has progressed less along a grammaticalization channel than Numbami has. Note that what is being suggested here is not that the developments in the two languages necessarily represent two different stages of one and the same historical process; for one thing, the verbs 'sit' in the two languages are not cognate. Rather, what is being suggested is more general: that in both languages the 'sit' verbs have — independently — developed grammatical functions, and that in Numbami the process has gone further than in Manam.

In some languages the verb 'lie' is used not with an aspectual function but rather to express the location of the event encoded by the verb with which 'lie' is in some kind of construction, as in Numbami and Tamambo. Example (138) is from Numbami:

- (138) I ma-pisa ai i-iyē weni.
 = (48) 1PL(EXCL) 1PL(EXCL)-find 3PL 3SG-lie bush
 'We found them in the forest.' (Bradshaw 1993:155)

This kind of use of 'lie' verbs is clearly related to their locative/existential uses to specify the location or existence of an entity: here it is the location of an event or state that is being signalled. It is not surprising that if a language has more than one locative/existential verb it is 'lie' that is used to signal the location of situations, because it is 'lie' that has the broadest locative uses with respect to entities: it is used wherever 'sit' or 'stand' are not appropriate.

5.4. The relations among the posture, locative/existential, and grammatical meanings and functions

The last question to be considered here is the diachronic relations among the main types of meaning/function that posture etyma carry in polysemies. These are posture meanings, locative/existential meanings, temporal extendedness, aspectual functions and event-location functions. It was argued in Section 5.2 that in the

cases of posture-locative/existential polysemy the posture meanings are historically primary, the locative/existential meanings being later developments. The question to be considered here is this: if a posture etymon has some grammatical uses, do these develop directly from the posture meanings or are they more closely related to the locative/existential meanings? It will be argued in what follows that it is the latter that is the case.

First, we find that when a posture etymon has a grammatical function it also has locative/existential uses. The presence of a grammatical function of a posture etymon implies the presence of a locative/existential meaning. (The presence of a locative/existential meaning of a posture etymon does not imply the presence of a grammatical function. In many languages posture etyma have locative/existential meanings but no grammatical functions.) The situations in Manam and in Numbami are particularly instructive in this respect. In Manam, 'sit' and 'lie' have locative/existential meanings, and both are used aspectually (marking the progressive and the continuative/persistent aspects, respectively). 'Stand', on the other hand, is not used as a semantically unmarked locative/existential verb, and it has no aspectual function. In Numbami, 'sit' and 'lie' have locative/existential uses; and 'sit' is used to mark the durative aspect, and 'lie' is used to mark the location of events. 'Stand' is not used as an unmarked locative/existential verb, and it has no grammatical functions.

And second, there are languages that have locative/existential verbs which do not carry posture meanings but where the etyma do carry grammatical, aspectual functions not unlike those found in the languages where it is posture forms that are, somehow, implicated: the imperfective in Loniu and Bislama, the continuous in Tok Pisin, the continuative/persistent in Toqabaqita; and in Araki the marker of the continuous aspect is a reduced form of the verb that means 'stay, dwell'. What these languages demonstrate is that etyma with locative/existential meanings but no posture meanings can also be used aspectually.

Putting the two pieces of evidence together, the following scenario emerges: posture meanings give rise to locative/existential meanings and the latter give rise to aspectual meanings:

- (139) posture > locative/existential > aspectual

The use of the verb 'lie' to signal the location of an event is an independent development from the locative/existential meanings: the range of subjects that a verb 'lie' takes expands from (non-clausal) NPs to clauses.

The historical process identified in (139) for the Oceanic languages is, in its basics, not unlike that identified for Bulgarian (and other languages) by Kuteva (1999): from "bodily posture" meanings via encoding the spatial position of objects to continuative/durative/progressive-aspect marking.⁷

Historical connections between posture and locative/existential meanings on

the one hand and certain aspects on the other are, of course, well known from languages around the world (see, for example, Comrie 1976, Bybee and Dahl 1989, and Bybee *et al.* 1994). Bybee *et al.* (1994) find that the progressive and the continuative aspects often come from the same lexical sources, and they suggest that in such cases the progressives develop from the continuatives. In the case of the Oceanic languages discussed here, the data available do not permit any hypotheses concerning the paths of development, continuative-to-progressive or progressive-to-continuative. In fact, in some languages the progressives and the continuatives have different lexical sources, involving different locative (and sometimes ultimately different posture) verbs.

Cross-linguistic studies suggest that of the three main posture meanings it is 'sit' that is most often implicated in the development of the progressive aspect. This is not at all surprising when one considers the following. First, the progressive aspect develops first with dynamic, activity verbs, whose subjects are agents (Bybee *et al.* 1994; also Dahl 1985). Second, humans are the quintessential agents. Third, of the three main postures, it is sitting that is characteristically human. And fourth, verbs with the meaning 'sit' acquire semantically unmarked locative (and existential) uses in which they are prototypically used with human subjects. It is the association of such verbs with humanness of their subjects that makes them better candidates for development into progressive markers than either of the other two basic posture verbs are.

Abbreviations

AD=adnominal; ADV=adverb; ANDAT=andative; ART=article; ASP=aspect; ASSOC=associative; ASSOCIAT=associated; BEN=benefactive/beneficiary; BF=buffer; COM=comitative; CONT=continuous; COP=copula; DEIC=deictic; DEM=demonstrative; DU=dual; DUR=durative; EXCL=exclusive; FOC=focus; GEN=genitive; IMPFV=imperfective; INCL=inclusive; INDEF=indefinite; IRREAL=irrealis; LIM=limiter; LINK=linker; LOC=locative; MODIF=modifier; NEG=negative; NOM=nominative; NONFUT=non-future; NONSG=non-singular; OBJ=object; PART=particle; PAUC=paucal; PERS=personal; PL=plural; POSS=possessive; POT=potential; PRED=predicate; PREP=preposition; PRO=pronoun; PROD=product; REAL=realis; REC=reciprocal; RED=reduplication; REL=relative; RES.PRO=resumptive pro-form; SEQ=sequential; SG=singular; SU=subject; SUBJ=subjunctive; TA=tense-aspect; TEN=tentative; TRANS=transitive.

Notes

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1. For the glossing conventions see Abbreviations. The conventions are those of the sources, except that in a few cases the glosses have been adjusted, mostly for the sake of uniformity.
2. Elsewhere (Lichtenberk 1991) I have used the term “heterosemy” to refer to semantic-functional networks where the meanings/functions are carried by reflexes of an etymon that belong in different morphosyntactic categories. Grammatical descriptions do not always make it clear what the morphosyntactic category of a posture etymon used with a grammatical function is, and so the term “polysemy” will be used here throughout.
3. ‘Lie’/‘sleep’ polysemy is common in Oceanic.
4. The literal gloss is Jauncey’s.
5. Schütz glosses *ki* ‘ABL(ative)’, but that appears to be an error.
6. The ‘SUBJ(unctive)’ gloss is taken from Schütz (1985).
7. I am grateful to John Newman for reminding me of Kuteva’s study.

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CHAPTER 12

The grammatical evolution of posture verbs in Kxoe*

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1. Introduction

Kxoe, spoken by approximately 8,000 members living mainly in the Western Caprivi of Namibia (cf. Brenzinger 1997), is linguistically defined as a Central-Khoisan or Khoe-language and belongs to the Western Kalahari-Khoe subgroup that consists of Kxoe, ||Ani-Kxoe, Buga-Kxoe, Naro, ≠Haba, G||ana, and G|ui (Güldemann and Vossen 2000: 102). Like all other Khoisan languages, Kxoe has a range of click symbols (|=dental, ||=lateral, ≠=palatal, and !=alveolar) that can each be voiceless, voiced, aspirated, etc.¹ It has vowel nasalization that is indicated by a ‘tilde’ on the vowel concerned. The tones on each vowel and syllabic nasal are indicated by [˘] for low tone and [ā] for high tone; mid tone is unmarked.

The verbal system of Kxoe is different from other Khoisan languages in the sense that it is extremely elaborated by means of morphological and tonological differentiation. Thus Kxoe distinguishes nine tense/aspect markers. All these markers are suffixed to a certain conjugated verb form; the structure of a finite verb is as follows:

verb + “juncture” + tense/aspect suffix

There are two kinds of “junctures”: one that relates the non-past tenses (referred to as ‘juncture I’) and another one that relates the past tenses to the verb (referred to as ‘juncture II’). Every juncture has a range of allomorphs as well as allophones (cf. Heine 1986).

The juncture I relates (a) the future tense marker *-gòè* which may also be used as marker for epistemic mood, (b) the present tense marker *-tè* which is also used as progressive marker (König 2000), (c) the progressive marker *-n//ùè*, and (d) the habitual marker *-//dè* to the verb. The three aspect suffixes under (b–d) can be traced back to three posture verbs ‘stand’, ‘sit’, and ‘lie’ respectively. In contrast, juncture II relates (a) a resultative marker that functions also as marker of a

simple past and (b) four pure past tense markers, i.e., today–yesterday–short time ago–long time ago (Köhler 1989: 122 f.).

In this respect, the verbal paradigm of Kxoe is not a coherent tense–aspect–mood (TAM) system, rather it is asymmetrical in the following way: future expresses tense and/or mood (T/M); present expresses tense and/or aspect (T/A) (cf. König 2000);² two markers are purely aspectual (A); four past markers express pure tense (T) and one past marker tense and/or resultative (T/A). This verbal system is shown in Figure 1.

In addition there exists also an atemporal form, i.e., the pure verb stem that denotes situations whereby the temporal unfolding is excluded. For example, the verb *kx'úé* 'live' is tense-marked when it is used in the meaning of 'live/stay somewhere at the moment', but unmarked when used as a generic concept.

The present chapter extends König's recent study on the aspectual function of the suffix *-tè* (cf. König 2000) by examining the aspectual function of all three posture verbs in Kxoe. The main goal of this chapter is to explain the asymmetric tense–aspect distribution of the Kxoe verbal system by describing its evolution according to the theory of grammaticalization as described by Heine and Reh (1982, 1984), Heine *et al.* (1993), and Bybee *et al.* (1994). My concern is to demonstrate how the rise of the whole verbal system is directly connected with the grammaticalization of the three posture verbs into various tense/aspect markers.

In Section 2 the three posture verbs are presented as lexical sources. Section 3 describes their lexicalization into copulative verbs (3.1), their use as semi-lexical markers of predicative possession (3.2) as well as their use as copulative auxiliaries (3.3). Section 4 shows the development into aspect markers (4.1), and finally the special role of 'stand' and its grammaticalization into a present tense marker is analyzed in more detail. Last but not least, the three markers *-tè*, *-n#ùè*, and *-//òè* are contrasted in Section 5 with the whole synchronic conjugation paradigm. Section 6 summarizes the results of the analysis.

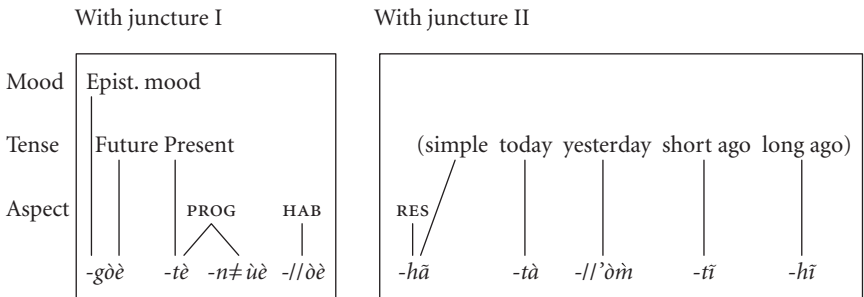


Figure 1. The verbal system of Kxoe

2. Posture verbs as lexical sources

The Kxoe posture verbs ‘sit’, ‘stand’, and ‘lie’ each have a full and a defective variant; the latter is marked either for present tense and/or not marked for any tense. In this section, examples for these three verbs and their defective variants — which are frequently used today still — are provided under 2.1–2.3.

2.1. ‘Sit’

The full verb is *n#ú* (or its variant *n#ú*) ‘sit down’, whereas the defective variant is the phonologically different form *n#òe* ‘sit’ with its free variants *n#ù* or *n#ũ*. These defective variants only occur as pure verb stems and do not accept any tense marking.

- (1) Full verb *n#ú/n#ú*:

Kàràkàràni cì-*n#ú*-á-xu-a-tè nò ’x’áo-*m* ’à
 Kàràkàràni NEM-sit-II-COMP-I-PRES-CONJ chop wood-3M.SG COP
 llqó llqó llqó llqó llqó llqó.
 ‘sound of chopping wood’
 ‘Kàràkàràni sits already and chops wood: llqó llqó llqó llqó llqó llqó
 [that’s how it sounds].’ (Kilian-Hatz 1999:301/309).

- (2) Defective verb *n#òe/n#ũ*:

Xàrn-tcà phèe-ku-a-n#ù yà-#áa-na-xu Kàràkàràni #’ám
 lion-3M.DU pant-REC-I-PROG come-enter-II-COMP Kàràkàràni above
 ókà *n#ũ* mú-*a*-hā ’à.
 LOC sit see-II-PAST OBJ.REL
 ‘The lions pant while they are running; they approach Kàràkàràni whom
 they saw sitting on top of [a tree stump].’ (Kilian-Hatz 1999:301, 309).

2.2. ‘Stand’

The full verb *té* has the meanings ‘stand’, ‘come to a standstill’; the same meanings are also conveyed in the defective verb *tĩ* that can be marked for past but never for present or future tenses:

- (3) Full verb *té*:

Táci-*m* áa luú kx’éxa xàm dī ’à
 o. brother-3M.SG DEM beat the drum while 3M.SG POSS
té-é-kò [. . .].
 stand-II-CONV
 ‘The older brother is beating the drum while standing . . .’ (Kilian-Hatz
 1999:321, 333).

- (4) Defective verb *tĩĩ*:
 Kàràkàràni áka tĩĩ.
 Kàràkàràni there stand
 ‘Kàràkàràni stood there.’ (Kilian-Hatz 1999:294/305).

2.3. ‘Lie’

The full verb is *//óé* and denotes the meanings ‘lay oneself down’, ‘lie’, and ‘sleep’. As first part of serial verb constructions or when followed by the causative marker it is reduced to *//ó*. Its defective variant is the tone-changed *//òe* ‘lie’, ‘sleep’. The dialogue of a tale given in example (5) includes both, first the defective and then the full verb:

- (5) [...] xàa wùú-tcà //òe á ngú óo kí?
 DEM hyena-3M.DU lie DEM house inside LOC
 ’Mm, xàhé //ó-xò-ro-xu-a-tà á ngú-cì óo kí
 yes 3F.SG lie-CAU-II-COMP-II-PAST DEM house-3F.SG inside LOC
 ≠á-ka-ra-xu-a-tà.
 hide-CAU-II-COMP-II-PAST
 ‘Are the two hyenas still in the house? [Lit. ‘Do the two hyenas still lie in the house?’] Yes! She made the two lie inside the house and hid them.’ (Kilian-Hatz 1999:293/305).

As the above examples indicate, the subject is always an animate or human referent. Thus the lexical meanings of these verbs are related to a referent that *can* change the position. However, these meanings in Kxoe are also transferred to objects that, by their very nature, can not change their position. This kind of expansion of the verb meaning and its uses will be described in the following section.

3. Semantic expansions of ‘sit’, ‘stand’, and ‘lie’

Kuteva (1999) shows how the spatial positioning of referents may be expressed in two ways: either by using (a) the mainly *figure*-based strategy where positioning of the objects is expressed by a posture verb or (b) the mainly *ground*-based strategy where the positioning of the objects is expressed by adpositions attached to the *ground* NP (as in the English sentence *the picture is on the wall*). Thus, Kxoe as well as many other languages of the world (e.g., in Norwegian, Danish, Bulgarian, Imonda, Mandan, or Kabyle) are representatives of *figure*-based languages, by using the posture verbs ‘sit’, ‘stand’, or ‘lie’ as the mechanism for spatial specification of the referent (Kuteva 1999:198 ff.). The following paragraphs demonstrate

this function and the semantic expansion of the posture verbs in Kxoe.

3.1. *The expansion to non-animate referents*

There is a clear meaning change of these three verbs in the reference language English because it is a *ground*-based language that must subsequently translate the verbs with the copulative verb ‘be’. However, the original meaning is still transparent in Kxoe and one observes only a slight metaphorical expansion of meaning by means of a transfer of the anthropocentric spatial concept onto inanimate objects. Thus, a tree is normally in vertical “upright” position, it “stands”, as opposed to a waterhole or a river that “lie” in a horizontal position, and finally ‘sit’ denotes objects that are small or neither completely vertical nor horizontal. Here too, the choice of one of the three posture verbs is strictly related to the physical appearance of the referent. Heine (1998) sums up the canonical use of the three posture verbs in Kxoe when specifying inanimate objects:

Inanimate nouns are typically associated with only one of the three markers. Thus,

- trees, hands, fingers, thorns, houses, or all abstract nouns are typically associated with the STAND-marker;
- place names, stones, birds, or scorpions take the SIT-marker, while
- rivers, lakes, kinds of soil, or countries, take the LIE-marker. (Heine 1998:9)

The following examples illustrate the use of the full conjugated posture verbs that are the predicates of an inanimate argument:

- (6) Nákò pò-rín ||á-ré-hā-hè kx’éi-khóé-hè pò-rín
 then jackal-3M.SG chew-II-PAST-3F.SG first-AG-3F.SG jackal-3M.SG
 tɕ’íkx’éi-rìn ókà cíi-nɕ’ú-à-tè [. . .].
 anus-3M.SG LOC arrive-sit down-I-PRES
 ‘Then, (the pit) of the first (fruit) that the jackal chews comes to sit in his anus [. . .].’ (Kilian-Hatz 1999:237/244)
- (7) ɕ’Aáró-mà xóm-m ki tɕ-è-||òè.
 tuber-3M.SG ground-3M.SG LOC stand-I-PRES.HAB
 ‘The tuber is in the ground [i.e. in upright position].’ (Köhler 1991:77)
- (8) Tcàrà-mà |éú-ca ||óé-é-hĩ.
 field-3M.SG big ADV lie-II-PAST
 ‘There was a big field.’ (Kilian-Hatz 1999:289/304)

But the copulative use of posture verbs as fully inflected main predicates of an argument is rare. The tendency is that the copulative meaning is denoted by a defective variant, as described in the following paragraphs.

3.2. The use in predicative possession

Heine (1998) describes in detail the use of the defective posture verbs of Kxoe expressing predicative possession as instances either of the *location schema* when occurring with a locative postposition as in the examples (9a/b) or of the *companion schema* when occurring with a comitative postposition as in example (10). Here the constructions ‘be at’ and ‘be with’ are interpreted as ‘have’. In these constructions, the non-inflected defective verb still remains the main verb, whereby the canonical copulative use described above is valid as well; (the examples from Heine differ slightly in their orthography from Köhler’s and the author’s ones in the marking of tones and nasalization):³

- (9) a. Tí ki lám̩ ʔgóàà n̩uín OR t̩ín.
 1SG LOC two stone sit stand
 ‘I have two stones.’ (Heine 1998:7)
- b. Xàñ ki t̩éka ŋuu ʔd̩è OR t̩ín.
 3.C.PL LOC good country lie stand
 ‘They have a nice country.’ (ibid.)

- (10) Tí ʔàmbara ʔxòà t̩ín.
 1SG hunger with stand
 ‘I am hungry.’ [Lit. ‘I have hunger’] (ibid.)

Although the canonical use of the posture verbs is valid in such possessive constructions, Heine reports that it is possible to replace optionally the defective verbs ‘sit’ and ‘lie’ by ‘stand’ without any semantic change. Thus Heine observes a tendency towards the formation of an unmarked vs. marked constructions:

What this means [. . .] is that the paradigm of postural markers is more conventionalized (or fossilized) in possessive constructions than in other use patterns, with the effect that it tends to be reduced to one marker, viz. *t̩ín*, that is, the three markers are being reduced to one, which is the most “unmarked” one, namely the STAND-marker. This means that the STAND-marker has been generalized to all possessive uses [. . .], even if the SIT- and LIE-markers have not yet been discarded. (Heine 1998:10).

Thus the verbs ‘sit’ and ‘lie’ are always still related to the semantics of the referent and remain as such *figure*-based, whereas ‘stand’ tends to be more and more aloof from this concept of positioning and becomes the unmarked copulative part in predicative possession.

3.3. Copulative auxiliary

Beside the rare use as fully inflected copulative posture verbs (3.1) and their use as predicates of a possession construction (3.2), the copulative meaning does not

arise with 'sit' and 'lie' when used as auxiliaries. There are many cases where the posture verbs are used as auxiliaries to a main verb. In the following sentences (11a–c) the posture verbs are defective auxiliaries to the main verb 'see'. In such constructions their function is to differentiate the positioning of the subject.

- (11) a. Tí-i dàràcì 'à tii tí 'à múùn-à-tè.
 1SG-POSS sibling OBL stand 1SG OBJ see-I-PRES
 'My younger brother (standing) is watching me.' (Heine 1998:9)
- b. Tí-i dàràcì 'à n#uín tí 'à múùn-à-tè.
 1SG-POSS sibling OBL sit 1SG OBJ see-I-PRES
 'My younger brother (sitting) is watching me.' (ibid.)
- c. Tí-i dàràcì 'à ||òè tí 'à múùn-à-tè.
 1SG-POSS sibling OBL lie 1SG OBJ see-I-PRES
 'My younger brother (lying) is watching me.' (ibid.)

The only posture verb that may have a pure copulative meaning when used as auxiliary is 'stand'. Compare the following sentences, where 'stand' may be used as full verb (12) as well as an auxiliary (13)–(14) denoting 'be', 'exist', 'live' (cf. also the full verb 'live' in (23)):

- (12) Xám tá-khòè-mà nò, Xám 'à n#ú-á-mà khóé-mà
 3M.SG old-AG-3M.SG CONJ lion OBJ sit down-II-APPL man-3M.SG
 Ngúiyà ||'áxa-a kǐ té-é-hǐ.
 baboon chief-OBL LOC stand-II-PAST
 'For him, the old man, for Lion, the chief, the acting man [Lit. 'the one who sits for him'] was Baboon.' (Kilian-Hatz 1999:246/257)
- (13) Yaá, tcá tcí-é-xu-a-||òòm té, [. . .].
 come(.IMP) 2M.SG grow-II-COMP-II-PAST stand
 'Come! You are now grown up [. . .].' (Kilian-Hatz 1999:296/307)
- (14) Tàxúákò kyáe-ku-a-tè ń ndja té-é-#èè, ń ndja
 and then wear-REC-I-PRES DEM side stand-II-drag DEM side
 té-é-#èè còàná-má.
 stand-II-drag loincloth-3M.SG
 'Then she dressed (him); this (huge) loincloth drags this side and the other side on the ground.' (Kilian-Hatz 1999:296/307)

It is not unusual for the verb 'stand' to develop into a copula, e.g., the Latin word *stare* 'stand' becomes the copulative auxiliary *estar* 'be' in Spanish' (Heine *et al.* 1993:206). The opposite development of 'sit' into a copula is also possible even in the same languages. Thus, Latin *sedere* 'sit' is the source for the Spanish copula *ser* (Heine *et al.* 1993:202). Since 'stand' is chosen in Kxoe to encode copulative meaning and predicative possession without relating to the positioning of the referents (insofar as no marked contrast in the positioning is needed) it is only

natural that ‘stand’ persists to be the more unmarked representative (as contrasted to the marked structures involving ‘sit’ and ‘lie’) of the grammaticalized posture verb structures, as will be seen in the next section.

4. Grammaticalization into aspect markers and into a tense marker

In this section the grammaticalization of the posture verbs into aspect markers and finally into a tense marker will be discussed. It must be borne in mind that I am putting forward an hypothesis about the historical sequence of events. In the face of the lack of historical records I will assume that the language has preserved in varying degrees the relevant stages. On the basis of synchronic facts from present-day Kxoe I will reconstruct the step by step development of the posture verb structures.

4.1. The aspectual function

The aspectual function of the posture verbs is not mentioned in Köhler’s grammatical sketches (1981, 1998). But there are clear instances of aspectual functions found in oral texts whereby aspect is encoded in the auxiliaries as well as in a suffixed form.

4.1.1. *Auxiliary*

The first stage in the evolution of the aspect marking is the appearance of an aspectual sense to the postural/copulative auxiliaries. Examples from present-day Kxoe can be found for ‘lie’ that convey a habitual or continuous meaning such as ‘normally’, ‘usually’, or ‘always’ as in (15). Here it is clear that ‘lie’ has lost all its postural semantics because the zebras are not lying at all but galloping:

- (15) Á-ta mǐ nò ||òe bèyèe-djì txèrìrí txèrìrí.
 thus sound CONJ lie zebra-3F.PL sound of zebras’ galloping
 ‘Thus the zebras’ galloping always sounds: txèrìrí txèrìrí.’ (Kilian-Hatz,
 in prep.: 213)

A similar example with ‘stand’ is given in (16), where it may be translated by the habitual glosses ‘used to’, the permansive ‘always’, or the durative. The preceding context of the example makes clear that the referents are performing their actions while sitting:

- (16) Tà-xú-ó ||é té n|oá-kx’o-ka-ra-hĩ.
 so 1.M.PL stand cook-eat-meat-INSTR-II-PAST
 ‘In this way we cooked and ate (usually/always) with it.’ (Köhler 1991:22)

4.1.2. *Suffixes*

The final stage in the development of the aspectual system involves the development of the auxiliaries as verbal suffixes along with some phonological reduction in their form. In present-day Kxoe the aspectual readings are in fact much more often encoded in a suffix than as a auxiliary. The phonological changes accompanying this development are as follows (cf. Köhler 1989:122):

- the full verb *té* and defective variant *tĩ* ‘stand’ → *-tè*
- the defective verb variants *n#ðe* or *n#ũĩ* ‘sit’ → *-n#ùè* or *-ñ*
- the full verb *llóé* and defective variant *llòe* ‘lie’ → *-llòè* or *llò*.

Example (17) demonstrates that the function of positioning of the referents is not excluded, but it is dominated by the aspectual reading:

- (17) Yà-mũũ-ì nò Wuú áki n#ũĩ-a-kò lqóró-nà
 NEM-see-IMPS CONJ hyena there sit-I-CONV burrow-3C.PL
 tcxáà-|xoà-a-n#ùè.
 try-with-I-sit
 ‘They come and see the hyena who is sitting there and trying (to get out of the enclosure) by burrowing (under the palisade).’ (Kilian-Hatz 1999:113/217)

As suffixes, the aspectual function of *-tè* (< ‘stand’) is the most inconsistent and expresses diverse imperfective readings, although the progressive is the most frequent and therefore its main function.⁴ In contrast, *-n#ùè* (< ‘sit’) conveys progressive aspect and finally *-llòè* (< ‘lie’) is now a habitual marker:

- (18) Kx’óǎ kú-ca-xa tí thám ’à llgàràá-à-tè.
 wait little bit 1SG letter OBJ write-I-PROG
 ‘Wait a little, I’m just writing a letter!’
- (19) Tí kũũ-à-n#ùé.
 1SG walk-I-PROG
 ‘I am walking.’
- (20) Xà-ná |óǎ ’à ll’ám-á-llò vé.
 3C.PL child OBJ beat-I-HAB NEG
 ‘They are not used to beating (their) children.’

4.2. *Grammaticalization into a present tense marker*

In this section I will consider the development of a present tense marker from the ‘stand’ verb/suffix, a development which is subsequent to the establishment of the aspectual system.

Köhler (1981:530) interprets the suffixes under (4.1) as markers restricted to present tense which indicate the positioning of the referent encoded in the subject. The postural connotation of these markers is still transparent in (17) and in ambiguous sentences such as (21):

- (21) Tí kx'ó-à-n#ùè.
 1SG eat-I-sit
 'I am eating (while sitting).' or 'I am eating.'

But in fact, the general restriction to present tense is not clear for the progressive marker -n#ùè and the habitual marker -//òè. They may be used in contexts happening in the present as well as in the future or in the past and they do not seem to be in opposition to future and past tense markers. In contrast, -tè can function as a present tense marker in clear opposition to future and past as demonstrated in (22)–(23):

- (22) ||èé-kxoè-djì |í-rín 'à kwéé-è-tè tí-mà ||é
 woman-3F.PL song-3M.SG OBJ refuse-I-PRES then 1C.PL
 txòórò-wà-gòè-βéé.
 dance-I-FUT NEG
 'The women don't want to sing, thus we won't dance.' (Köhler 1991:551)
- (23) Ts'áá-hā xà-rín dì bó 'à n||áá xù-cì kx'ám ki á-rìn
 steal.II-PAST 3M.SG POSS axe OBJ DEM matter-3F.SG because 3M.SG
 'à kwá-kà-à-tè.
 OBJ pay-CAU-I-PRES
 ('They) refund him because (they) have stolen his axe.' (ibid.)

The grammatical evolution from progressive to present tense is not unusual in the languages of the world. Bybee *et al.* (1994:140) explain this common grammaticalization path as follows: "Present situations may be viewed as progressive activities that are ongoing at the moment of speech." In sentences like (24) -tè focuses on the actuality of the action whereby the progressive meaning is still inherent:

- (24) Tí té-è-tè Múùtc'iku ki.
 1SG live-I-PROG/PRES Mutc'iku LOC
 'I am (actually) living in Mutc'iku.'

According to König (2000), the function of -tè as a present tense marker is always co-present with the progressive insofar as the verb is inchoative, stative, or terminative.⁵ Thus the grammaticalization into a present tense marker is not accomplished because it is not yet possible with all verbal classes. However, in such contexts where the verbal suffixes have pure progressive function, actuality is

expressed by using the adverb *lê* or *lê-xá* or its clickless variant *tè* ('now', 'at the moment', 'this minute'):

- (25) Tcéú ʔá-a-n≠ùè lê-xá.
 shi-fruit ripen-I-PROG now
 'Now the shi-fruits are ripening.' (C. König, p.c.)
- (26) Xá-má djàò-á-n≠ùè tè.
 3M.SG work-I-PROG/sit now
 Now he is working (while sitting).'
- (27) Tí djàò-á-tè tè.
 1SG work-I-PROG now
 'Now I'm working.'
- (28) Tcá léi-e-tè tè.
 2M.SG lie-I-PROG/stand now
 'Now you are lying (while standing)!'

My hypothesis is that the grammatical evolution of the progressive marker *-tè* into a present tense marker is favored by a second source item, namely this homonymous temporal adverb *tè*, that may have merged with the suffix *-tè*. In sentences as (29a) and (30a) one does expect that *-tè* marks progressive when combined with verbs such as 'clap' and 'cook' which belong to the class of activity verbs; actuality should be expressed by the adverb as in (27). However, analogous sentences as (29a-b) and (30a-b) demonstrate that the suffix *-tè* has the function to mark actuality in particular contexts as opposed to the suffix *-n≠ùè* that marks pure progressive. This leads to the conclusion that the suffix *-tè* took over the function to mark actuality normally expressed by the adverb *tè* and thus expands to another verb class:

- (29) a. Xà-hé ʔx'án-a-tè,
 3F.SG clap-I-PRES
 'She claps her hands once/now.' vs. Progressive:
 b. Xà-hé ʔx'án-à-n≠ùè.
 3F.SG clap-I-PROG
 'She is clapping her hands (during the whole song).'
- (30) a. Tí cǐǐ-è-tè.
 1SG cook-I-PRES
 'Now I (start to) cook.' vs. Progressive:
 b. Tí cǐǐ-è-n≠ùè.
 1SG cook-I-PROG
 'I am cooking.'

Thus, in the evolution of the present tense marker *-tè*, two grammaticalization channels are used simultaneously. The first channel is called *serial periphrasis*, whereby “an auxiliary is reanalyzed as a tense or aspect marker” (Heine and Reh 1982: 116 ff.). This evolution can be explained in the expansion from CONCRETE to ABSTRACT, i.e., the concrete, visible spatial positioning of referents is expanded to a more abstract temporal positioning via the process of metaphorical transfer of *space = space in time*. The second channel is the *adverbial channel* whereby a temporal adverb loses its semantics and thus undergoes syntactic change (Heine and Reh 1982: 119 f.).

5. The present-tense system in the verbal paradigm

We return to the question of why the verbal system is asymmetric with regard to the tense, aspect, and mood distribution. According to Köhler (1981: 351) and Heine (1986: 16 ff.) the past tense system of Kxoe is very much older than the present tense system. This is evident when one compares the verbal system of Kxoe with other Central-Khoisan languages. The evolution of a tense system can be summed up for this group of languages as follows.

The first stage is that temporal positioning is expressed either by verbal auxiliaries and/or by temporal adverbs. At this stage, the so-called juncture is grammaticalized from a copula (Heine 1986) and a coordinating conjunction ‘and’ that have merged together to join two verbs in composition, as a serial verb construction. The lexical morphemes become past tense suffixes while fossilized in this connected and finally bound form. This stage is achieved in Cara, Naro, and Kua (Heine 1986: 17 f.). The second stage is that an analogous future tense is formed by copying the established template ‘verb-juncture-suffix’. The last stage is the evolution of an analogous present tense system. This last development has only barely commenced in ||Ani-Kxoe, the language that is most closely related to Kxoe. Kxoe stands out as the only language in this group that has already reached all three stages (Heine 1986: 18).

It is interesting that the defective verb variant *t̃t̃* ‘stand’ is not only the source for the present tense marker *-tè* in Kxoe but also for one recent past tense marker *-t̃i* ‘short time ago’; similarly, there is another verb *t̃aŋ* ‘stand up’ that appears to have become the past suffix *-t̃a* ‘today morning’; and a third posture verb *ll’òm* ‘sit down on a tree (of birds)’ is likely to be the source for the past tense suffix *-ll’òm* ‘yesterday’ (Köhler 1989: 123).

This means that the Kxoe not only developed an analogous formal construction to bind tense markers on the verb but they also used partly the same grammaticalization strategy by utilizing posture verbs. Thus the channel of *serial periphrasis* is the strategy in Kxoe to develop tense markers (as well as aspect markers) with the posture verbs as the main lexical sources.

All tense/aspect markers are suffixed and not prefixed, although the auxiliary generally precedes the inflected main verb in serial constructions as in (14). This postverbal incorporation can be explained by means of the fact that Kxoe does not have prepositions and prefixes but only postpositions and suffixes. In general, grammatical morphemes always follow their nucleus. The grammatical status, indicated by its bound form, is further obvious because the tense suffixes generally have a low or mid tone that changes depending on the verbal tone pattern: high tone is an exclusive trait of lexical items in Kxoe, grammatical elements have mostly a low tone, but middle tone is also possible.

Today, the only aspectual function confined to the past, namely the resultative, is expressed by a suffix derived from the copula *hãã* 'be', 'be at' that is found in other Central-Khoisan languages too, e.g., in Nama the copula verb *hã* is used to produce state verbs (Olpp 1977:95). The derived Kxoe suffix *-hã* denotes simple past tense with action verbs and present tense-resultative with state verbs, e.g. *tcéka-ra-hã* ('has become good'='is good'). According to Bybee *et al.* (1996:63 ff.) one main lexical source for resultative is the copula; a common development of the resultative in the languages of the world is the past.

Beside the simple past marker/resultative *-hã*, the other four past markers do not have any aspectual implication although Bybee *et al.* (1996:92) trace back the evolution of past markers to the evolution of resultatives into perfectives, anteriors, and finally past markers as can partly still be observed with *-hã*. Consequently, past markers are more grammaticalized than aspect markers. One reason that four past suffixes in Kxoe lack aspectual connotations may be that these markers are very old grammaticalizations and therefore already lost their former aspectual function. This again is in accordance with Heine's and Köhler's findings that the past tense system of Central-Khoisan languages is much older than the future or the present. This may finally explain the synchronic asymmetry of the verbal system in Kxoe: it is the result of different periods of similar grammaticalization processes whereby the present tense system still shows all stages of its development, but the past tense system is already at the end of its grammaticalization cycle whereby it has lost some of its former functions, so that the stages are no more transparent.

The two temporal-modal functions of the future suffix *-gòè* in Kxoe can be termed *future certainty* vs. its epistemic use called *future possibility* following Bybee *et al.* (1996:248). Köhler (1989:123) suggests that it may be derived from the verb *koé* 'go towards'. This seems plausible because, again, the choice of a motion verb 'go' would be one of the most frequent strategies in the languages worldwide to develop future (Bybee *et al.* 1996:266 f.). Kxoe has not developed any further tense or aspect distinction for future. Thus the Kxoe speaker do not seem to see any necessity to indicate a temporal differentiation and a change of situations that haven't happened yet. The latter may also be one indication that the (formally) analogous formation of future tense is probably contingent upon an established

past system, i.e., the future tense probably only arose after the past system had evolved to the point of losing its aspectuality.

6. Summary

In this study, I have shown the impact that the posture verbs ‘sit’, ‘stand’, and ‘lie’ have had for the evolution of the verbal system in Kxoe. We may summarize the results of the above analysis, including Köhler’s (1989: 123) reconstructions, as in Figure 2. The posture verbs are shown in bold, since they are the main sources for the different tense/aspect-suffixes whereas the other verbal concepts are less important as source concepts.

The different subsystems of the verbal system of Kxoe were not formed simultaneously but at different periods over various stages of grammaticalization: initially the past tense system develops, then the future tense, and finally the present-tense/aspect. The Kxoe speakers followed analogous grammaticalization paths in taking posture verbs as main lexical sources that turn into aspect and finally tense markers via the channel of *serial periphrasis*. Thus, the evolution of the present tense/aspect markers cannot be seen separately from the whole verbal paradigm. Rather, that evolution follows the already complete grammaticalization path that led to the earlier rise of the past tense system. The evolution is syn-

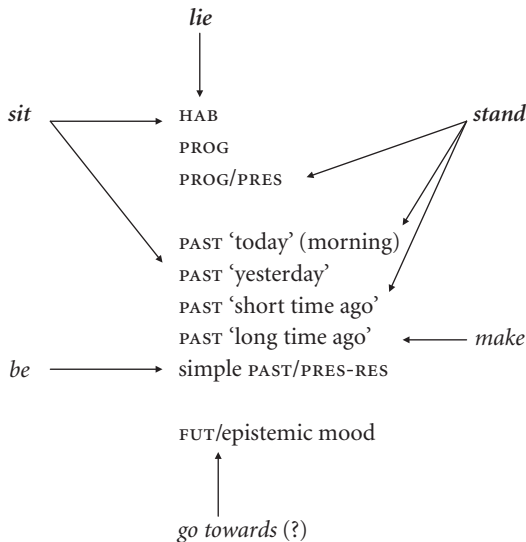


Figure 2. The evolution of the verbal system: targets and source concepts

chronically transparent, because all stages of grammaticalization are still present in the present tense/aspect system, i.e., the canonical posture interpretation as well as the aspectual or temporal interpretations are possible in present-day Kxoe. In order to understand which of the three functions is foregrounded in a particular context we can extend König's (2000:12) implicational ordering by adding another initial stage: first the canonical posture interpretation, then the aspectual, and finally the temporal one. The past tense system, however, already reflects traces of functional loss by means of lacking aspectuality with four of its markers. Here one can add a tendency of formal loss that can be observed in a kind of phonetic erosion, whereby the juncture for past partly eroded with some monosyllabic verbs. From this perspective, the tense system of Kxoe represents a whole cycle of grammaticalization whereby the rise of the aspect/present tense system is still transparent but the past tense system shows already some functional and formal traces of its decline. The stages for the evolution of the whole verbal system can be summed up as in Table 1. The stages V-X are the stages involving the grammaticalization of the posture verbs.

Table 1. Stages of the evolution of the verbal system in Kxoe

Stage	Description
O	temporal unfolding is expressed by auxiliaries and/or temporal adverbs
I	formation of a past tense system by a cycle of verb serialization, mainly of posture verbs (<i>serial periphrasis</i>)
II	juncture for verb serialization/verbal compounding > past-marker (juncture II)
III	formally analogous development of future tense - <i>gòè</i>
IV	expansion of <i>future certainty</i> to <i>future possibility</i> (epistemic mood)
V	posture verbs > copula/posture auxiliaries
VI	copulative/posture auxiliaries > aspect auxiliaries
VII	aspect auxiliaries > aspect suffixes in formal analogy to the future and past system (<i>serial periphrasis</i>)
VIII	progressive suffix - <i>tè</i> > present tense marker (depending on verb classes)
IX	temporal adverb <i>tè</i> > actuality marker (in opposition to the suffix - <i>tè</i> under VIII)
X	merging of adverb <i>tè</i> and present tense/aspect suffix - <i>tè</i> (<i>adverbial channel</i>), expansion to activity verbs
XI	juncture I > non-past marker

Abbreviations

ADV=adverbializer; AG=agentive; C=common gender; CAUS=causative; COMP=completive; CONJ=conjunction; CONV=converb; COP=copula; DEM=demonstrative; DU=dual; F=feminine; FUT=future; HAB=habitual; IMPS=impersonal; INSTR=instrument; LOC=local; M=male; NEG=negation; NEM=new event marker; OBJ=direct object; OBQ=oblique

case; PAST=past; PL=plural; POSS=possessive; PRES=present tense; PROG=progressive; REC=reciprocal; REL=relative pronoun; RES=resultative; 1=first person; 2=second person; 3=third person; I=juncture for non-past; II=juncture for past.

Notes

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1. Notes on orthographical conventions: the clicks each consist of an influx (i.e., the primary articulations) and an efflux or secondary articulation. The following combinations are possible and have phonemic status (The series is demonstrated on the dental click, but it is valid for each of the four primary articulations):

- | = voiceless dental click
- |' = glottalized voiceless dental click
- lg = voiced dental click
- lh = aspirated dental click
- n| = prenasalized voiceless dental click
- nlg = prenasalized voiced dental click
- lq = dental click followed by an uvular plosive
- lx = dental click followed by a velar fricative
- lx' = dental click followed by a velar ejective.

The following consonant symbols differ from IPA standard:

- dj = voiced alveolar affricate
- kh = aspirated velar plosive
- khy = aspirated palatovelar fricative
- tc = voiceless alveolar affricate
- tcx = alveo-palatovelar affricate
- th = aspirated alveolar plosive
- ' = glottal stop.

2. König (2000) even observes traces of a modal function.
3. A final convention for the Kxoe orthography was established only in 2000 by the Cologne research team.
4. According to König, the aspectual interpretation of *-tè* is always the progressive. Thus she claims that the possible other imperfective interpretations arise because of the interaction between the progressive and the inherent *Aktionsart* of the verb respectively (König, p.c.).
5. Depending on how a change of situation is inherent, König (2000: 11) distinguishes five verb classes in Kxoe: (a) totally stative, e.g., 'be', (b) inchoative-stative, e.g., 'know' or 'be red', (c) activity, e.g., 'cook', (d) gradually terminative, e.g., 'die', and (e) totally terminative, e.g., 'find'. The Kxoe posture verbs 'sit', 'stand', and 'lie' belong to the class of inchoative-stative verbs as opposed to the activity verbs 'stand up' and 'sit down'.

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CHAPTER 13

Posture verbs in Mbay

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1. Introduction

In what follows I will provide a brief description of the important role the notions ‘sitting’, ‘standing’, and ‘lying’ play in the Mbay language.¹ The principal focus will be on the three verbs *ndi* ‘to sit’, *dàè* ‘to stand’, and *tò* ‘to lie’, and I will outline here the phonological, syntactic, and semantic characteristics of these morphemes. In addition, I will examine the extent to which the notions of ‘putting’, ‘taking’, and ‘falling’ are influenced by whether the affected object is perceived as ‘standing’, ‘sitting’, or ‘lying’. My goals in the work are descriptive in nature, and I make no attempt to relate findings to any particular version of linguistic theory. The data for the work has been extracted from databases used in the preparation of Keegan (1996, 1997, 1999).

2. Phonological characteristics

The three posture verbs differ from other verbs in Mbay in that their phonological shape is that of grammatical formatives rather than that of verbs. The shape of morphemes of major classes (verbs and nouns) is normally constrained as follows:

1. Syllables will have the shape VC, CVV, or CVC, where the initial C is optional, and can either be a single consonant or a prenasalized stop cluster. VV represents a long vowel; if a vowel is long, it will not be followed by a consonant (except in cases where bi-syllabic morphemes have lost their initial vowel, such as *là* ‘send’, derived historically from *àlà* or *ilà*):

- | | | | | |
|-----|-------------|--------------|------------|-----------|
| (1) | <i>àn</i> | ‘to say’ | <i>tāl</i> | ‘to kill’ |
| | <i>ndīr</i> | ‘to cook’ | <i>tāā</i> | ‘to take’ |
| | <i>ndūu</i> | ‘to explode’ | <i>kōo</i> | ‘to cry’ |

2. The short syllable CV *does* occur in verbs and nouns, but it is normally found only in multi-syllabic morphemes:

- (2) *àdā* 'to give' *ndijè* 'to ask'
tápā 'to bother' *mbītē* 'to squeeze'
bàlà 'be numerous' *késā* 'to cough'

The morphemes of grammatical formatives, on the other hand, most commonly consist of a single syllable, and this syllable is usually short. The grammatical formatives include the pronominal affixes, most conjunctions, demonstratives, interrogatives, auxiliary verbs, the locative marker, and the pronominal prefixes. The verbs of position also fall into this grouping:

- (3) *tā* 'locative marker' *ī-* 'you (nominative suffix)'
kā 'towards' *kà* 'with'
nà 'and, but' *tò* 'to lie'
ndī 'to sit' *dā* 'to stand'

The tonal characteristics of the posture verbs differ from verbs derived from VCV (e.g. *là* 'to send') in that the latter change from low to high tone in the first person singular and the second person (e.g. *m-lá* 'I send'), while the posture verbs do not:

- (4) *m-tò* 'I lie' *kà-tò* 'we sit'
ī-tò 'you lie' *ī-tò-ñ* 'you sit'
tò 'he/she lies' *tò-ñ* 'they sit'

3. Use as verbs

The verbs of position are used within a fairly broad semantic range. The range of meanings for these verbs, and the distribution of each form, depends to a varying degree on the base meaning. In general, there is a tendency for the base meaning ('stand', 'sit', and 'lie') to be retained. However, in many cases where the positional aspect is viewed as irrelevant, *ndī* 'to sit' tends to dominate, even where there would be little possibility of the action being perceived as something which is being done while seated.

3.1. Posture

The core meaning of each verb of position is completely retained, and it is not possible to interchange the verbs when they are used to denote this core meaning:

- (5) a. *bòṅg tò sīi bè àdā dān-lò tètà.*
hyena lay a.little only until middle.of-place broke
'Hyena lay down a short while until it was the middle of the night.'

- b. Ādō báà mbāa lò-sá ndì tá.
give bench guest of-you he-sit LOC
'Give your guest a bench to sit on.'
- c. Ngōn ká ndóo ndīyā à dā jáa.
child that learns walk AUX stand shakily
'A child who's learning to walk stands shakily.'

These forms are used to indicate both the action of assuming a position and the state of being in the position. However, in the former case, the adverbs *dōó* 'up' and *bār* 'down' are usually added to the verb (e.g. *dā dōó* 'to stand up', *ndì bār* 'to sit down', and *tò bār* 'to lie down').

3.2. Living

The verbs of position are used to translate 'to live'. To a lesser degree, the core meaning of the verb of position is maintained. The most general translation of 'to live' is with *ndì* 'to sit'.

- (6) a. Sùngóo màdā-bēe nāa-gō ndì-ñ kàdè nāa tá
guess neighbor together-PL they-live next one.another LOC
nà òō-ñ kām-bēe nāa ál. Kùm-jó.
but they-see compound each-other not eyes-our
'Guess the neighbors who live right next to each other but who never see inside each other's compounds. Our eyes.'
- b. Tūm ì kǎnjā ká tītā lī bē; à ndì būl mǎn tá.
eel is fish that like snake EC AUX it-lives deep.part water LOC
'The eel is a fish like a snake; it lives in deep water.'
- c. Nāsār-gō ká kíl-gō ní ndì-ñ àmèfikā tō nò ì-ñ bēf-gō.
whites that blacks who live America LOC EC are slaves
'Blacks who live in America are slaves.'

The verb *tò* 'to lie' is also a fairly common translation of 'to live'. There is a tendency to use *tò* in cases where the creature doing the living is perceived as 'lying' in its habitat:

- (7) a. Mār à tò bāa-á à sà dēē-gō hō kǎnjā-gō hō.
crocodile AUX lives river-LOC AUX eats people and fish-PL also
'The crocodile lives in the river and eats people and fish.'
- b. Tējā-biyā à tò kām bālō tā bēf dā-nàng tá.
ground-bees AUX live in hole LOC down ground LOC
'Ground bees live in holes in the earth.'
- c. Ká-bār ì kūr ká bōo ká à tò kām mǎn-ndii tá.
kábār is insect that is.big that AUX lives in puddles LOC
'The insect called *kábār* is a large insect that lives in puddles.'

The verb *dâ* is also used to translate ‘to live’. It is the verb of choice when the idea of ‘putting up with difficult circumstances’ is implied:

- (8) a. Kóo-í gòtóo à ī-dâ kà kàa-í.
 mother-your is.not EC you-live with grandmother-your
 ‘If you have no mother you live with your grandmother.’²² (Proverb)
- b. Ngõn ká ngé-á-gã òy-ñ dâ dò-ń.
 child who parents-his-PL died-PL lives head-his
 ‘A child whose parents have died lives alone.’

dâ is also used in those rare cases where ‘to live’ might include the idea of ‘standing’, as in the following example:

- (9) Kāgã-dīl ì kāgã ká ndíl-ká-yèr-gã à dâ-ñ tó ngáy.
 mahogany is tree that evil-spirits AUX live-PL LOC a.lot
 ‘The mahogany is a tree in which many evil spirits live.’

Here, the notion of ‘standing’ is added to ‘to live’, no doubt because the living is being done inside a tree.

Nonetheless, the rules for the selection of the translation for ‘to live’ are by no means hard and fast:

- (10) a. Kīnjá-lò-yòo à tò-ñ mbī mātō tó ká ngór ngáy.
 death-chicken AUX lives leaves Parkia.tree LOC that young a.lot
 ‘This type of bird likes to live in the young leaves of the Parkia africana tree.’
- b. Mēē ì dāā ká bāa-á, à dā būl-ú lā ngáy yé.
 turtle is animal of river, AUX lives deepness-in that a.lot EC
 ‘The turtle is a river creature, it likes to live in deep water.’

While it could perhaps be argued that *tò* in (10a) is used because the bird is perceived as ‘lying’ in its nest, in (10b) we find *dâ* used in a sentence which is very similar to cases where we have seen *ndi* (6b) or *tò* (7a) used.

3.3. Staying/Remaining

The verbs of position are a common way of translating ‘to stay, remain’. By far the most common translation of ‘stay’ is *ndi* ‘to sit’, and it is not required that the notion of ‘sitting’ be associated with the meaning:

- (11) a. Ī-ndi lāā nà àdē m-āw nà m-dēē.
 you-stay here and let I-go and I-come
 ‘You stay here until I come back.’

- b. M-ā m̄-ndì Māysalāā nēē nāa mètá ké-kàá sós wàñ.
I-will I-stay Moissala here months three or four perhaps
'I plan to stay here in Moissala for three or four months.'
- c. Ā ī-ndì kókó-ē?
will you-stay long-time-qu
'Are you going to stay for a long time?'

The common use of *ndì* for 'to stay' can perhaps be explained by the fact that the verb, like the English verb 'stay', suggests the notion of 'stillness, lack of movement':

- (12) a. Ī-ndì jén ādō j-òō dà tàà tá.
you-stay quietly so we-hear on words LOC
'Sit quietly so we can hear.'
- b. Ī-dēē à ī-ndì kārī nà otá bàl tàà.
you-come EC you-sit nothing and don't interrupt words
'If you come then just sit there and don't interrupt.'
- c. Ndi lòo kārā ndum njà bēē.
sit place one rotted leg mushroom.
'Staying in one spot made the mushroom stem rotten.' (Proverb)
- d. Tà kùm-m̄ tá dá ā ī-ndīyā ál nà kálá-m̄ tá
before eyes-my LOC EC AUX you-walk not but absence-my LOC
gògá-nēē àn-ñ ī-ndì bēf ál.
afterwards they-say you-sit down not
'In my presence you don't promenade about, but after I'm gone
they say you roam about.'

The other verbs of position, *tò* and *dā*, are less commonly used to translate 'to stay' and when they are used there is often a ready semantic explanation:

- (13) Ī-dā kèkèkè nà m-ā m̄-ādē-ī gúsè lò-í.
you-stay calm and I-will I-give-you money of-you
'Stay calm, I'll give you your money.'

In (13), for example, the use of *dā* can be explained by the fact that it carries the idea of 'putting up with', one of the common uses of this verb. The verb *tò* is sometimes used instead of *ndì* to indicate 'stay still', or if the 'staying' is clearly done while lying down:

- (14) a. ɔ́dá rō-í ál ī-tò dònònò.
move body-your not you-stay still
'Don't move a muscle, sit perfectly still.'
- b. Súu tò jén àdē Léw bīi gògá.
Suu remained still so-that Lew slept again
'Suu laid still so that Lew went back to sleep.'

In (14b), *tò* is used because the action is done while lying in bed, but in (14a) it is not clear that position is relevant.

3.4. Locative uses

The standard translation for the verb ‘to be’ in Mbay is *ì*, which has both locative and existential uses. The verbs of position are common replacements for *ì*, especially when followed by a locative phrase. The choice of verb depends again to a large degree on the perceived position of the subject. For inanimate objects, however, the nature of the subject is an important factor in whether it is perceived as standing, sitting, or lying:

- (15) a. *Ún kùbā ñ tò kàdā séjà tá nò ādā-m̄.*
 take clothing that lies next-to chair LOC EC for-me
 ‘Get the clothes next to the chair for me.’
 b. *Wúí ñ tò tà-í tá nò, òtá gájā kē kōs!*
 peanuts that lie mouth-your LOC EC don’t chew towards out
 ‘Those peanuts in your mouth — don’t chew them and then spit them out!’

In (15a), the flattened position of clothing on the ground places it in a category of nouns perceived as lying.

If the subject is perceived as standing, *dā* is used:

- (16) a. *M̄-dā lòpitàiè nò ādā ngōn-á òy tà kùm-r̄n tá.*
 I-stood hospital the so child-his died before eyes-my LOC
 ‘I was in the hospital and so his child died in my presence.’
 b. *Ōo kīgā kārā ñ dā dān.*
 look tree cotton that stands there
 ‘Look at that cotton tree over there.’
 c. *Kòl ì ngōn kújá ká dā m̄yù tá kàt̄s ndii.*
kòl is small house that is country LOC for rain
 ‘Kol is a small hut in the country for when it rains.’

In (16a) the speaker is assumed to be standing in the hospital, while in (16b) the vertical position of a tree places it in the category of nouns which are normally perceived as standing.

If the subject is understood as ‘sitting’, the verb *ndi* is used, and it is again used more generically in cases where the notion of ‘standing/sitting/lying’ is not perceived as relevant.

- (17) a. *Bátú ndi dōdō dō kújá tá.*
 cat is up on house LOC
 ‘The cat is up on the house.’

- b. Tà gīgō ndì kâ dōō jùjèjà.
end stump was towards up sticking-out
'The tree stump was sticking up.'
- c. Kújǎ lò-rí ndì kâ dǎng.
house of-me is that separate
'My house is set apart {from the others}.'
- d. Rísǎ ní ndì kâ jóo-gǎ míi nò àgǎ mǔsǎsǎ.
rice that was with pot-PL five the rose.up tremendously
'The rice in the five pots increased in volume tremendously.'
- e. Tóo kǎmyōō lò bǎǎ-á ndì dóbǎ-ó nò.
wreck truck of father-his lies road-in EC
'His father's old wrecked truck is over on the road.'

Here we find that the shapes of a 'tree stump' (17b) or a car (17e) are such that they are perceived as sitting. As we have seen above, *ndì* is also often used in locative expressions where we might expect to find *dâ* or *tò*. In (17c), for example, it is used with the 'house', which might more normally be perceived as a 'standing' object (16c), while in (17d) it is found with 'rice', something that is usually perceived as 'lying'.

The principles for determining the perceived position of an inanimate object are somewhat complex, but depend to a large degree upon three factors: (1) the physical nature of the object; (2) its plexity; and (3) its perceived upright position. Each of the posture verbs tend to be associated with specific physical shapes. An object with a long, narrow shape tends to be associated with *dâ* (stand), an object which is flat with *tò* (lie), and an object which is squat with *ndì* (sit). The distinction is further refined in the following way: objects which are perceived as having a base are perceived as sitting, and will normally be used with *ndì*. This group will include such things as mortars, cups, basins, pots, and baskets. Long, thin objects (pestles, poles, walls, even trees) are perceived as having no base, and hence the form *dâ* (stand) will normally be used. It matters not if the standing object is supported (as a pole leaning against a wall) or contained (as the same pole stuck in the ground). Some objects appear capable of being perceived either as having a base or not. For example, *kújǎ* 'house' is commonly used both with *dâ* (stand) and *ndì* (sit). The four legs of a table or a chair, or the wheels of a car also tend to be viewed as a form of base, and as a result Mbay tables 'sit', unlike their standing English counterparts.

A second factor in the perception of the position of an object is its "plexity", its state of articulation into equivalent elements (Talmy 1988: 176). The perceived position of an object which consists of one such element (uniplex) will depend on the object's physical nature and its vertical position. Objects which consist of more than one elements (multiplex), such as grain, seeds, flour, and liquids, are always

perceived as lying, and are used with the posture verb *tò*. As a result, a single grain of peanut will ‘sit’ on the table, whereas a bunch of peanuts will ‘lie’ there. Multiplexity, then, is more important in determining perceived position than is the object’s physical shape or upright position.

The third factor in determining the perceived position of an object is its upright position. A long, thin object will normally be used with *dà* (stand), but if that same object is laid on the ground, *tò* (lie) will be used. Thus, a pestle stood up against a wall, or a pen stood up against a basket on a table, will be used with *dà*, but if the pestle is lying on the ground or the pen is lying on the table, *tò* will be used. Similarly, an object with a base, such as a mortar, will normally be used with *ndì* (sit). But if that mortar is laid down on its side, it will be considered ‘lying’ and *tò* will be used. The perception of upright position of the object, then, is a more important factor than its physical shape, especially in determining whether an object is lying or not lying. Mbay appears to differ in this regard from languages such as Trumai (Guirardello-Damian, this volume), where it is the perceived horizontal position to a base (ground, wall) which plays a more important role in determining the posture verb to be used.

Weighing the relative importance of each of these factors then, we find the following. First, if the object is multiplex, then *tò* (lie) will always be used. If the object is uniplex, then its perceived upright position is the principle factor in determining the choice of posture verb. If the object is something which is flat (such as a mat, a mattress, or cloth) and lying on a flat surface, or if it’s something which is normally found standing or sitting, but its upright position has been upset and it has been placed in a lying position, *tò* again will be used. *Tò* is also used with nouns of location, including general nouns of location (e.g. *lòo* ‘place’, *dànnàng* ‘the ground’), lakes, rivers, and ponds, since they are perceived as lying on the surface of the earth:

- (18) Lòo tò mböl.
place is humid
‘The ground is damp.’

If the object is uniplex and in an upright position, its physical nature is the determining factor. If the object has a base (and is positioned upright on that base), then the verb *ndì* (sit) will be used. If the object has no base and is in an upright position, then *dà* (stand) will be used. Unlike languages such as Trumai (Guirardello-Damian: this volume), *dà* does not appear to be associated with the notion of ‘sticking out’:

- (19) a. Jàm-kóś dèē-kś-dēē à tēē ngáy ǎ.
adam’s-apple woman will stick.out a.lot not
‘A woman’s Adam’s apple doesn’t stick out very much.’

- b. Ksó kúbā lò-í báy ká dòó.
neck clothes of-you rises towards up
'Your collar is sticking up.'

It is worth remarking that when found in locative expressions of this type the posture verb simply replaces the verb *ì* 'to be'; the syntactic structure of the sentence remains identical, and no additional morphological or phonological change occurs.

3.5. Existential uses

The posture verbs can also be used at times to replace *ì* where it expresses existence:

- (20) a. Wúl tò nòó-ō? Tò nò.
peanuts are there-QU Are there
'Are there any peanuts? There are.'
b. Kānjā tò súkā-ú mbùjā-mbùjā.
fish is market-in in.abundance
'There is an abundance of fish in the market.'

The standard translation for 'there is/are' is *ì nò*. It can be replaced by *tò nò* (20a), *ndì nò* or *dā nò* to emphasize the perceived position of the speaker. However, the posture verbs are only used to express existence when the verb is immediately followed by a locative clause (e.g. *nò* 'there' in (20a), *súkā-ú* 'in the market' (20b)). Otherwise, the verb *ì* is normally used:

- (21) a. Mār ì ngáy tà-kùm-kāa tá í-ndín.
crocodiles are a.lot section.of.river LOC this
'There are a lot of crocodiles in this section of the river.'
b. Tíyā-gā ì-n ngáy kām mǎngò tá í-dǎn.
ants-PL are a.lot in mango.tree LOC this
'There are a lot of red ants in that mango tree.'

3.6. Verbal expressions and idioms

The posture verbs are also commonly found in a wide range of expressions and idioms. One common type of expression using these verbs are cases where they are used as a translation for 'to be' and are then followed by an ideophone. While the perceived position of the subject is again important in determining the choice of verb, there nonetheless exist many cases where the motive for the choice is unclear.

- (22) a. Kété dóbá dā sàsàsè nà òò-ñ gògò tórí.
 before road was bumpy but they-smoothed-it back perfectly
 ‘The road used to be bumpy, but they made it nice and smooth again.’
 b. Tà-í dā jààà.
 mouth-your stands wide.open
 ‘Your mouth is wide open.’
 c. Ī-lā kórá ndòm dā-ñ jùuu yé.
 for-this markings squirrel are-from.it striped EC
 ‘And that’s why the markings of the squirrel are with stripes.’

In (22a) and (22b), for example, it is not clear why *dā* ‘to stand’ is used with the subjects ‘road’ or ‘mouth’. As noted above, we would normally expect to find ‘to lie’ used with roads, bodies of water, etc., since they are perceived as ‘lying’ upon the land:

- (23) a. Ī-hó dóo n tò tèn sám āw-ñ bēē-é.
 you-take road that is here straight go-with.it home-to
 ‘Take the road here straight and go home.’
 b. Kàar ì ngòn mǎn ká dūú ká à tò dāng kōr tá.
 pond is small water that little which AUX lies plain bush LOC
 ‘A pond is a small body of water found in the bush.’

Very often the form chosen is associated with a particular meaning rather than with a particular ideophone. For example, *dā* ‘to stand’ is used with adverbs and ideophones meaning ‘open’:

- (24) a. Tà-bitó dā hōy.
 door is open
 ‘The door is open.’
 b. Tà-dóbá dā tàgò gāà.
 door is open wide
 ‘The door is wide open.’
 c. Kùm-á dā ndāà nà ndi bògò-ñ-á.
 eyes-his are wide-open but AUX rob-PL-him
 ‘His eyes are wide open but they are robbing him anyway.’

The posture verb *tò* ‘to lie’ is associated in a similar way with ‘quietness’:

- (25) a. Lòo tò nding.
 place is quiet
 ‘It’s perfectly quiet out.’
 b. Káa búndá kōo dā lòo tò lỳ.
 noise rifle sounded then place was still
 ‘The sound of a gun was heard and then it was perfectly quiet.’

- c. ɔ́dɔ́ rō-í ǎ́ ǐ-tò dònònò.
move body-your not you-be still
'Don't move a muscle, sit perfectly still.'
- d. Lòò tò jùjèjè kètɔ́ ngār ká bòò tèē bēē-é.
place was silent because king that important arrived village-LOC
'A great silence reigned because an important chief had arrived in the village.'
- e. Ká-bòò, ǐ-tò sélólá, ǎdō m-lá mètè ndàa kóó-í tá.
lizard you-be quiet let I-put beads white neck-your LOC
'Oh lizard, sit still, and let me put white beads around your neck.'
(Song)

While the preferred posture verb for this meaning is *tò* 'to lie', *ndì* 'to sit' is also found in similar expressions:

- (26) a. ǐ-ndì jén ǎdō j-òò dà tàa tá.
you-sit quietly let we-hear on words LOC
'Sit quietly so we can hear.'
- b. ǐ-ndì gàsò nà m-ā m-ndōgō kùbā m-ǎdō-ǐ.
you-sit still and AUX I-buy clothes I-give-you
'Sit still and I'll buy clothes for you.'

In general, expressions using posture verbs resist easy identification into clear semantic groupings, as the following cases with *ndì* suggest:

- (27) a. M-ndì bájír.
I-sit all.set.up
'I'm all set up in life.'
- b. Dèē-ká-dèē ùn nìi-n mālà tá ndì sì-á tùyý.
woman took rival-her wrestling LOC sat with-her hard
'The woman wrestled her rival and knocked her down hard.'
- c. bēē n-ndìn màjàl, ká ā ǐ-ndì dò rō-í tá.
village this is.bad, so AUX you-be on body-your LOC
'This village is bad, so be on your guard.'
- d. Jàng-í mār dɔ́ɔ ǎdō ǐ-ndì dīngàm.
rival-your stirs.up trouble so you-be vigilant
'Your rival is stirring up trouble so be vigilant.'
- e. Kā-ndì bàā-bè dā tèē kā dō-já tá.
we-stopped an-instant then he-appeared towards on-us LOC
'We stopped there an instant and then he came upon us.'

In (27a), the use of *ndì* 'to sit' is quite similar to the English expression 'I'm sitting pretty'. In (27c) and (27d) we find that *ndì* is used to indicate 'vigilance'. It can

also be used to mean ‘to halt’ or ‘to stop movement’, as in (27e). In (27b) we find the expression *ndì kà*, literally ‘sit with’, used to mean ‘to knock [s.o.] down’. It is interesting to note that substituting the posture verb with a different one can at times result in a distinct expression:

- (28) a. *dā sè-dá dòṵ àdā t̄l-n tà kàlà lō-á.*
 he-stood with-them up so-that they-finished end work of-him
 ‘He forced them to finish his work.’
 b. *Ṁ-dā sì-á ká njà-á òdà nàng ǎl kà ndòṵ*
 I-stood with-him that leg-his touched ground not to plow
lòò lò-m bó-nèē.
 place of-me today
 ‘I forced him to plow my field today.’

In (28) we find that the expression *dā kà* means ‘to force’.³ In (27b) we saw *kà* used with *ndì* with a very different meaning. The uses of *dā* also vary surprisingly:

- (29) a. *dā b̄àb̄ērō dà yáa t̄ lō-á kà ñ-ùn.*
 he-is acting-tough about things LOC of-him in-order he-take-them
 ‘He is trying to intimidate him to get something from him.’
 b. *Kālā kūbā lò-m dā régáreee.*
 thread clothing of-me is worn.to.breaking.point
 ‘The threads of my clothing are worn to the breaking point.’
 c. *Bis̄-dò-á dā jáa.*
 hair-head-his stands sticking.up
 ‘His hair is dirty and sticking up.’
 d. *Njà b̄ís lō-m tètò dā lèng.*
 leg dog of-me broken stands limp.and.hanging.down
 ‘My dog’s leg was broken and it was limp and hanging.’
 e. *dóbá ká dā d̄úy.*
 road that is straight
 ‘a perfectly straight road’

The use of *dā* in (29a) ‘acting tough’, is somewhat similar its use in (28). In general, it seems to be used to denote ‘forcefulness’. Its use in (29c) and (29d) might be viewed as cases where the subject is perceived as ‘standing’, but it is more difficult to make this argument for (29b) or (29e).

The expressions with *tò* ‘to lie’ also resist categorization, except in those cases where the subject is something which can be perceived as ‘lying’:

- (30) a. *Ī-tò kārī à? Ṁ-tò kārī.*
 you-lie in-health QU I-lie in-health
 ‘How are you? I am fine.’

- b. Dèè-ká-dèé òò kàm ngóo àdā tò njóróng.
 woman smoothes inside gourd so it-lies even
 'The woman smoothed the inside of the gourd so that it was perfectly even.'
- c. Yáa lò-á tò mbùjà.
 thing of-him lies abundance
 'He is abundantly rich.'
- d. Mâtàlā lò-í tò mbòm.
 mattress of-you lies bouncy
 'Your mattress is full of bounce.'

It is used as a standard greeting (30a) regardless of the position of the subject. In (30b), (30c) and (30d) the argument could be made that *tò* is again a translation for 'to be', and that the subject is perceived as 'lying'. This is clearest in (30d), where 'mattress' is a flat object, and in (30b) its use might be tied to the fact that 'the inside of the gourd' is a location. In (30c), we find it used with the abstract noun *yáa*, 'wealth'.

4. Position verbs used as auxiliaries: progressive aspect

There are three verbal aspects in Mbay. Simple aspect consists of the simple form of the verb marked only with the subject number affix, and is used to express simple present or simple past which is neither habitual nor continuous. Habitual/Future aspect consists of the simple form of the verb preceded by the auxiliary verb *à*. It is used to indicate both future action and habitual action. Progressive aspect consists of the simple form of the verb preceded by one of the posture verbs, and it is used to express a continuous action, one which occurs over a period of time:

- (31) a. *dāa* 'he/she does/did'
 b. *à dāa* 'he/she will do'
 c. *ndi/dā/tò dāa* 'he/she is doing'

Here again the choice of posture verb depends to a large extent on the perceived perception of the subject. When *dā* is used, the implication is that the subject of the verb is standing:

- (32) a. Dèè-gō dā lūwō-ñ yáa-ká-sà ngé-bōo-gō.
 people stand distributing food hungry-PL
 'The people are distributing food to the hungry.'
- b. Bārà-kòsà dā là hòr mbī kám ká tùtò kárám.
 farmer stands lighting fire leaves bushes that dry very
 'The farmer is burning the extremely dry leaves.'

- c. Káyè! Ōo ngōdā́ n̄ sɪ́ndá dā́ àỹ dá!
wow! Look running which horse stands running EC⁴
‘Wow! Look at the speed at which that horse is running!’
- d. Jàjárí dā́ t̄s̄r̄ dā́ā kà n̄-dáw̄.
butcher stands cutting.up meat that he-sell
‘The butcher is cutting up the animal to sell.’
- e. Ngōn-ká-màndè dā́ ndōm wúnjè-wúnjè.
young-woman stands dancing rhythmically
‘The young woman is dancing in a lively and rhythmical fashion.’

In each example in (32), *dā́* is unlikely to be substituted for another posture verb because the verbs (distributing food, burning leaves, running a race, butchering an animal and dancing) are all actions which are normally done standing.

When *tò* is used, the implication is that the subject is ‘lying’:

- (33) a. Ngōn tò ìl ngōn-jī-n̄.
child lies sucking small-hand-his
‘The child is sucking on his finger.’
- b. Ngōn tò b̄i t̄n̄.
child lies sleeping there
‘The child is sleeping.’
- c. Yé, ngōn-r̄n̄ tò n̄ō!
oh no, child-my lies crying
‘Oh no, my baby is crying!’

When the verb *ndi* is used, the situation is not so clear. It will, of course, be used if the subject is seated:

- (34) a. Ā ī-ndi ī-sá yáa à ōtá kùnjā kón-í.
AUX you-sit you-eat food EC don’t blow nose-your
‘When you are eating, don’t blow your nose.’
- b. Ngōn ká dūú ndi àỹ bíyā fip̄.
child that small sits drinking porridge with.a.slurp
‘The small child drank the porridge with slurping noises.’
- c. Dèè-ká-dèè-gā ndi t̄s̄-n̄ d̄ỹ.
women sit shelling-PL karite-nuts
‘The women are shelling the karite nuts.’
- d. Ndi m-úsá kām ngóo kàdā ọọ t̄r̄í.
sit I-scrub interior gourd so it’s-smooth perfectly
‘I’m scrubbing the inside of the gourd so that it’s perfectly smooth.’
- e. Ngōn ndi t̄n̄ ngōn-jī-n̄.
child sits licking small-hand-his
‘The child is licking his finger (seated).’

- f. Dèè-ká-dèè ndi ndir taa.
 woman sits cooking sauce
 'The woman is cooking the sauce.'
- g. Dèè-ká-dèè ndi òw kãnjã.
 woman sits cooking.lightly.over.fire fish
 'The woman is cooking the fish lightly over the fire.'

In each case in (34) the action is performed by the subject who is sitting. Eating and drinking — (34a) and (34b) — and cooking and cleaning — (34c), (34d), (34f), and (34g) — are almost always used with *ndi* because women generally do this work seated on a low stool. In (34e), the use of *ndi* indicates that the subject is seated; had he/she been lying *tò* would have been used, as (33a) demonstrates.

In a great many cases, however, *ndi* is found in cases where it is not clear that the subject is seated, or even where it is clear that the subject is not seated.

- (35) a. M̄-tél m̄-ndi m̄-dāa kàlà gògá.
 I-return I-sit I-do work again
 'I'm doing the job over again.'
- b. Ì náā há ndi yékā kágā yíkàtò?
 it.is who that sits shaking tree hard
 'Who is it that's shaking the tree so hard?'
- c. Ndi āw dá? Ndà m-āw súkū-ú.
 sit you-go where sit I-go market-LOC
 'Where are you going? I am going to the market.'
- d. Dèè màdā ndi òsā pāa ràdìyòò tá.
 person some sits singing song radio LOC
 'Someone is singing on the radio.'
- e. Kàn ndi m-él tàa dá òtá mbòḡ gír-m̄.
 when sit I-talking words EC don't make.sound behind-me
 'When I'm talking, don't make a scornful sound with your mouth at me!'
- f. Tàatòlāā ndi ọọ bēe báy-tòḡ.
 Tatala sits ruling village still
 'Tatala still rules over the village.'
- g. Ngé-dáw-yáa-gā ndi ndōr-ñ nāā.
 person-sell-thing-PL sit competing-PL each-other
 'The merchants are competing with each other.'

With verbs of action and movement, for example, it is more likely to find *ndi* used even where it is clear the subject is performing the action standing, as in (35a), (35b), and (35c). Verbs concerned with speech (talking, asking, singing, etc.) are also commonly found with *ndi*, as are many other verbs where the position is not

perceived as important. Of course, it would be possible to use *tò* or *dâ* to emphasize the fact that the action is performed lying or standing.

Ndì is also used as the auxiliary verb in many cases where the subject is not human:

- (36) a. Lòo ndì dīw, ī-ndúl tà bàlà bīyā-gā.
 place sits getting-dark you-close end pen goat-PL
 ‘It’s getting dark, close the entrance to the goat pen.’
 b. Hòr ndì dēē pár kā bēē-é.
 fire sits coming straight towards village-LOC
 ‘The fire is heading straight towards the village.’
 c. Dò-rín ndì ndāa.
 head-my sits becoming.white
 ‘My hair is turning white.’

While it should be clear from this that *ndì* ‘sit’ has a predominant place among the posture verbs, it not the case, however, that it can be used as a general replacement for *tò* and *dâ*. For example, it would be impossible to find *ndì* used with a verb like *bīi* ‘to sleep’ unless the subject had actually fallen asleep sitting up.

5. Use as adverbs and demonstratives

5.1. Adverbs

The same morphemes *ndì*, *dâ*, and *tò* are also used to form adverbs, *ndìn*, *dân*, and *tèn*, all of which are translated as ‘here’ or ‘there’. An interesting phonological aspect of these forms is that the tone of the final /n/ can be changed to high tone with no change in meaning (*ndìn*, *dân*, and *tèn*). The perceived nearness or farness of the object is determined by context, and does not affect the choice of form. Again, the principal factor in determining the form used is perceived position of the object.

- (37) a. Ōo kīgā kārā n dā dân.
 look tree cotton that stands there
 ‘Look at that cotton tree over there.’
 b. Ī-hó dóbā n tò tèn sám āw-nèē bēē-é.
 you-take road which lies here directly go-with.it home-to
 ‘Take the road here straight and go home.’
 c. Ūn wāt n ndì ndìn.
 you-take glass that is there
 ‘Get that glass over there.’

- d. Ōo gō mbētē ní m̄-lā ndín màjà.
 you-look over papers that I-lay here well
 'Watch over these papers for me.'

In (37a), *dān* is used to translate 'there' because the object is perceived as 'standing'. In (37b) *tèn* is used because the object is perceived as 'lying'. In (37c), *ndin* is used because the object is perceived as 'sitting', since it has a base. And in (37d) we find *ndín* used where we do not expect to find it, as the object would normally be perceived as 'lying'. It is very common for the posture adverbs to immediately follow posture verbs, as in (37a), (37b) and (37c).

These adverbs are also used with the complementizer *lā* to translate 'here is/are' or 'there is/are':

- (38) a. Bíkà lò-í lā tèn.
 pen of-you that here
 'Here is your pen.'
 b. Wàt lò-í lā ndin.
 glass of-you that here
 'Here is your glass.'
 c. Dèē kàá ní ndà-m̄ lā dān.
 person very that hit-me that there
 'There is the very person who hit me.'

These adverbs are also used in the emphatic expression *lā dān/ndin/tèn*:

- (39) a. M-ii ngè bēe Māysālā lā m̄-dān.
 I-am person village Moissala that I-here
 'As for me, I was born right here in the town of Moissala.'
 b. bògè-ñ lòo tó màdē lā ndin-ndin.
 they-stole place LOC some that-here-here
 'Those people there stole something for sure.'
 c. Jóo lò-m̄ t̄s̄ t̄ḡ-bè lā m̄-ndin.
 pot of-me broke yesterday that I-here
 'Yesterday my pot broke on me.'

This common but difficult to translate expression adds the notion of certainty or unexpectedness. The choice of adverb depends to some degree on the perceived position of the subject, but *ndin* is by far the common form used.

5.2. Demonstratives

The adverbials discussed in the previous section are used to form the common demonstratives, *ndin*, *í-dān*, and *í-tèn*. These forms appear to be derived from

the complementizer *n̄* ‘which’ followed by the adverbials *ndìn*, *dàn*, and *tèn*. Thus, *n̄-tèn* would be literally ‘which is here’. However, *n̄* has been dropped prior to *ndìn*, possibly because this form begins with an *n*.

All can be made plural by doubling the form (e.g. *dèè-gō ndìn-ndìn* ‘those people’). The key factor in determining which form is used is again whether the object is perceived as ‘sitting’, ‘standing’, or ‘lying’. Standing objects, such as poles, fences, things leaned up against a wall — anything in an upright position — will be followed by *n̄-dàn*:

- (40) a. Ngōn *n̄-dàn* dá dāa pàa bè.
boy that EC does stupid-things only
‘That boy there does nothing but stupid things.’
b. Tíyā-gō ì-n̄ ngáy kàm mángò tó *n̄-dàn*.
ants-PL are a.lot in mango LOC that
‘There are a lot of red ants in that mango tree.’
c. Née-m̄ gèe nápàr kùbō *n̄-dàn* ngáy.
wife-my likes kind clothes that a.lot
‘My wife likes this style of clothes very much.’
d. Ngán-gō dā òng-n̄ tà kújé tó *n̄-dàn*.
children stand playing before house LOC that
‘The children are playing in front of that house over there.’
e. Ī-gāñ njālā *n̄-dàn* nò ōo.
you-observe pants those EC you-see
‘Take a look at those pants over there.’
f. M̄-h̄s dō kújé ká kījè *n̄-dàn*.
I-take on house that new that
‘I’ve decided on that new house.’

In (40) we find that, not surprisingly, ‘houses’ and ‘trees’ are considered ‘standing objects’, and so *n̄-dàn* is used. Its use with clothes is also very consistent when the clothes are being worn. When clothes are lying on the ground, *n̄-tèn* is more likely to be used.

If the object is perceived as ‘lying’, the demonstrative *n̄-tèn* will normally be used. This will include flat objects, such as books, papers, mats, group objects, such as rice or grains, or anything which can be considered ‘laid’ in its position:

- (41) a. Ī-rī wúl *n̄-tèn* ādō j-òo-n̄ bīyā.
you-crush peanuts these so we-cook-with.them porridge
‘Crush up the peanuts so we can make some porridge with them.’
b. Yāa *n̄-tèn* à kún-n̄-á ‘tēmē’.
thing this AUX call-PL-it ‘sifter’
‘This thing is called a sifter.’

- c. Dǎǎ n-tèn ɔ̀tə̀ ndùm.
meat this smells rotten
'This meat smells rotten.'
- d. Lòo n-tèn ɔ̀r hɔ̀r-hòtə̀ tītə̀ gúm bè.
place this takes slipperiness like gúm ɛc
'This area is as slippery as the gum plant.'
- e. Ȯtə̀ kǎy mǎn n-tèn.
don't drink water this
'Don't drink this water.'
- f. Ī-báy kɔ́ nà bǎlò-mǎn n-tèn ɔ̀o ngáy.
you-move away for hole-water this deep a.lot
'Step back for the well is very deep.'
- g. Ī-hó gúsə̀ n-tèn sém ǎw-nèé ǎdə̀ bɔ́ɔ́-í.
you-take money this tightly go-with.it give father-your
'Hold this money tightly and go and give it to your father.'
- h. Ī-bír pǎl n-tèn ĩ-lǎ dɔ́ sɪ́ndá tǎ ǎdə̀ j-ǎw.
you-roll mat this you-put on horse LOC so we-go
'Roll up this mat and put it on the horse and let's go.'
- i. Tà-kùm-kǎa tǎ n-tèn kǎnjə̀ ɔ̀sə̀ ngáy tītə̀.
section LOC this fish abound a.lot in.it
'In this section of the river, the fish really abound.'

The examples in (41) suggest that the rules for the selection of the demonstrative are similar or even identical to those for the selection of the posture verb. Items such as 'meat' (41c), 'water' (41e) and 'money' (41g) are viewed as having been laid in position, and as we saw with the translation for 'to be', locations are also grouped into this category (as in (41d) and (41i)).

If the object is perceived as 'sitting', the demonstrative will be *ndìn*. As with subjects of posture verbs, this will include objects with bases (cups, shoes, baskets, chairs, tables, basins, plates). It can also be used for flat objects which have been stacked and is the most common verb found for periods of time. As with its corresponding posture verb, *ndìn* is also used in many cases where we might not expect to find it:

- (42) a. Màr ì ngáy tà-kùm-kǎa tǎ n-ndìn.
crocodiles are a.lot section LOC this
'There are a lot of crocodiles in this section of the river.'
- b. Lǎrmǎ-gə̀ ndìn-ndìn ɔ̀ɔ̀ kələ̀-dǎa-í túu-bè.
people these watch conduct-your all
'All the people here are watching your conduct.'

- c. *bēe n̄-ndìn màjàl, kó ā ī-ndì dō rō-í tó.*
 village this is.bad so AUX you-be on body-your LOC
 ‘This village is bad, be on your guard.’
- d. *Kàm dēmàsè tó n̄-ndìn m-ā m-āw mbāa.*
 in week LOC this I-will I-go trip
 ‘This week I’m going to travel.’
- e. *Tāa n̄-ndìn bōw ngáy.*
 sauce this is-thick a.lot
 ‘This sauce is very thick.’

In (42a) we find *ndìn* used with a location, and in (42e) it is used with ‘sauce’; in both cases we might expect to find *n̄-tèn*.

There are some cases where the rules governing the choice of demonstrative appear to be less clear:

- (43) a. *Ūtō tà bàlò n̄-dān.*
 cover top well that
 ‘Cover up the top of that well.’
- b. *Nāa n̄-dān ì dō-nāa kó-mbééré.*
 month this is harvest corn
 ‘This month is the season for harvesting corn.’

In (43a) it is difficult to see how a well could be perceived as ‘standing’. And in (43b), we find *n̄-dān* used with ‘month’, where we might expect to find *ndìn* in its place.

5.3. Putting/Taking/Falling

The morphemes associated with the three posture verbs and the related demonstratives are not unique in being affected by the perceived position of the subject. The Mbay verbs used for ‘to put’, ‘to take’, and ‘to fall’ are also affected in a somewhat similar fashion. However, here we find that some of the same principles apply, others do not, and in other cases new principles are found which we have not seen with *dā*, *ndì* and *tò*.

If the object which has been put is multiplex, then either the verb *ùṽ*, or its synonym *mbéṽ*, ‘to put, pour’ is used:

- (44) a. *Ūṽ wúl kàm sákò tó.*
 he-put peanuts in sack LOC
 ‘He put the peanuts in the sack.’
- b. *Dèè-ká-dèḗ sòō wāa ùṽ kàm kèè tó.*
 woman pounded millet poured in basket LOC
 ‘The woman pounded the millet and poured it into the basket.’

- c. Dà-būu-lòò ì lòò ká dèē-ká-dèé-gā à ùū-n búu-hòr tó.
ash-pile is place that women will put ashes LOC
'An ash pile is a place where women throw away their ashes.'
- d. Bārà-kòsà ùū kàtā-sàngà gír búl tó kà ñ-ndūu-á.
farmer put fertilizer on cotton LOC to he-develop-it
'The skilled farmer puts fertilizer under the cotton to make it grow better.'

These same verbs are also used when an object or group of objects is perceived as lying. This might include plural uniplex objects, or soft objects with no firm shape, such as cloth.

- (45) a. Ngõn ùū mbētē kàm bādī tó.
child put papers in satchel LOC
'The child put his papers in the satchel.'
- b. Náv-gā ùū-ñ bándó kàm màn tó.
fishermen threw net in water LOC
'The fishermen threw the net in the water.'
- c. Bálá kóo-dèé-gā à ùū-ñ ngóo kàm làng tó.
old women will put gourds in string.bags LOC
'Old women put gourds in string bags.'
- d. Nēé-m ndāgō dāa ùū kàm sàbā tó.
wife-my bought meat put in basket LOC
'My wife bought the meat and put it in a basket.'
- e. Kínjá ùū kàw-ñ.
hen laid eggs-its
'The hen laid some eggs.'

From the examples in (44) and (45) it is evident that *ùū* is not merely a translation of 'to pour', but rather a general verb of 'putting' used when the object is something that is viewed as 'lying'. The objects here (grains, powders, fertilizer, liquid, meat, coals etc.) are exactly the same type of objects we have seen used with the auxiliary verb *tò* and with the specifier *tèn*.

With single uniplex objects, the verb *lā* 'to put, toss' is used:

- (46) a. Ngè-dāa-gātā lā gúsà kàm kújá mòjà tó.
merchant put coin in nest flycatcher LOC
'The merchant put a coin in the flycatcher's nest (for good luck).'
- b. Jàa ì bándó ká à lā-ñ màn-á.
jaa is net that will throw-PL water-in
'Jaa is a net that's thrown in the water.'

- c. Kĩnjá lā kàw.
 hen laid egg
 ‘The hen laid an egg.’

Thus we find that in (46c), the fact that ‘egg’ is singular is shown by the use of *lā* instead of *ùũ* (45e). This situation is very different from what we have seen with the posture verbs, where the number of the subject has no relevance in determining the choice of verb used.

Both *ùũ* and its synonym *mbél* are also used as intransitive verbs, where they are translated as ‘fall, spill etc.’ They are used when their subject is viewed as something ‘lying’:

- (47) a. Lĩ mbél wùkà.
 snake fell softly
 ‘The snake fell with a soft thump.’
 b. dí ùũ kɔ́ɔ?
 what spilled out
 ‘What spilled?’
 c. Ngõn dā ndégā mbàng dɔ́ɔ bǎribáa ní nām-á dāa
 boy was picking.up stones pieces beribaa that friend-his made
 wõng nà ùũ kɔ́ɔ nò.
 anger and threw away EC
 ‘The boy was picking up the stones used as pieces for the game called beribaa that his friend hand thrown away in anger.’
 d. Póśà lò-rĩ mbùtə àdā ngán sálē-gā lò-rĩ ùũ kɔ́ɔ.
 Pocket of-me pierced so small coins of-me spilled out
 ‘My pocket had a hole in it and all of my coins fell out.’
 e. Ōtə kũn yáa-tà tá nà súwǎf à tēē ùũ kón-í tá.
 Don’t take cover LOC lest steam will exit fill nose-your LOC
 ‘Don’t lift the cover lest the steam come out and pour into your nose.’

There are two distinct antonyms for *ùũ*. For plural objects or multiplex solids, the verb *ɔy* ‘to take, to gather, pick up’ is used:

- (48) a. Ngè-bògə dēē ɔy yáa-gā túu-bè kàm-ndògā tá lò-á.
 thief came took things all compound LOC of-him
 ‘A thief came and stole everything in his compound.’
 b. Ká-titè-gā à ɔy-n jingá yáa-kōo.
 ants will gather crushed millet
 ‘The tiny ants carry away pieces of crushed millet.’
 c. Nél ɔy nāng kā kũm dēē-gā tá.
 wind took ground towards eyes people LOC
 ‘The wind blew the sand into the people’s faces.’

- d. Dèè-ká-dèḗ à òy lòo kà ndisā.
 woman will sweep place with broom
 'A woman sweeps with a broom.'
- e. Ngè-yáa òy gúrsà njùkà àdā nēé-ḡ.
 rich-person gathered money bunches gave wife-his
 'The rich man gathered a bunch of his money and gave it to his wife.'
- f. Súu òy dāa dōsà jáng mí.
 Suu gathered meat it-filled baskets five
 'Suu gathered the meat which filled five large baskets.'
- g. Dèè-gā à òy-ḡ kàw tànjà kōf.
 people will gather eggs guinea-fowl field-in
 'People gather guinea fowl eggs in the field.'

The key role of the perception of the position of the object of òy is evident in cases such as (48c) and (48d). It is used in (48c) to translate 'to blow sand (into people's faces)' because sand is viewed as lying. In (48d) it is used to translate 'sweep', because 'place', 'ground', etc are viewed as lying. This factor is more important than the semantic differences of the verb.

However, if the object is a multiplex liquid, the verb òdà 'to get, fetch' is used:

- (49) òdà mǎn ká kàm túkà tá.
 he-got water that in barrel LOC
 'He got some water from the barrel.'

Here again an additional distinction is made, one not found when distinguishing between the posture verbs: tò is used with multiplex objects, regardless of whether they are solid or continuous.

If the object is perceived as 'standing', or if it is perceived as 'sitting', then the verb ndā is commonly used to translate 'to put':

- (50) a. Nēé-m ndāgō dāa ùy kàm sàbā tá nà ndā dō-ḡ tá.
 wife-my bought meat put in basket LOC and put head-her LOC
 'My wife bought meat, put it in the basket and then put the basket on her head.'
- b. Dèè-ká-dèḗ ngīyā ngàrì ndā mǎn tá.
 woman peeled cassava put-it water LOC
 'The woman peeled the cassava and put it in water.'
- c. Ī-ḡir túwā nò Ī-ndā kàdà lòo tá.
 you-roll mat that you-put-it against place LOC
 'Roll up the straw mat and put it against the side.'
- d. Dèè-gā ndā-ḡ mbùr dàn-á lā kà n-òḡ-ḡ yé.
 people put-PL 'boule' middle-in that so they-eat-PL EC
 'The people put the 'boule' in the middle so they could eat.'

- e. *M̄-ndā gòy kàdā kújā tó.*
 I-stood pestle against house LOC
 'I stood the pestle against the house.'

The antonym of *ndā* is *ùn* 'to take, lift', and like *ndā*, it is used for objects which are perceived as 'standing' or 'sitting':

- (51) a. *Ngāró ùn nìngà nà tóō "háá" kám lā ùr-nèé*
 Ngaro took spear and moaned 'há' first that threw-with.it
jàng-n̄ yé.
 rival-his EC
 'Ngaro seized the spear and with a grunt he threw it at his rival.'
- b. *Kòdā ùn gindā òo kòsà tó.*
 blacksmith took metal forget hoe LOC
 'The blacksmith took the piece of metal and forged a hoe from it.'
- c. *Ngôn ùn sùndá ká òy ngáy.*
 child lifted suitcase that heavy a.lot
 'The child lifted the heavy suitcase.'

The verb *sō* is used to translate 'to fall' in cases where the subject is a person, or if it is a thing which is perceived as having been 'set' or 'stood':

- (52) a. *Mbētē/wàr/kāgā sō.*
 book/glass/tree fell
 'The book/glass/tree fell.'
- b. *Ngôn sō dòó kāgā tà.*
 child fell up tree LOC
 'The child fell down from the tree.'

There is a frequentative form for 'put' and 'fall' when the object is uniplex and perceived as 'standing' or 'sitting'. The verb *tāndā* is the frequentative for *ndā* 'to put' and is used to indicate putting multiple objects. The verb *tāsō* is the frequentative for *sō* and is used to indicate that multiple objects have fallen. There is no frequentative for *ùu*, although *tāsō* is also used for objects which are perceived as 'lying'.

A number of interesting generalizations emerge from the 'put/take/fall' data. Viewed from the standpoint of 'standing/sitting/lying', the situation appears confusing. A distinction is made between objects which are perceived as lying and those which are not perceived as lying, but no such distinction is made between objects which are perceived as standing and those which are perceived as sitting. If viewed in terms of application or non-application of the rules, on the other hand, the situation is somewhat less complicated. In Section 3.4 above we saw three principles guiding the selection of posture verbs in locative

expressions. First, if the object is multiplex, it is perceived as a 'lying' object. This holds true in all situations: *tò* will be used as the posture verb, and *ùù* will be used for 'putting' and 'falling'. An additional distinction is also made for 'taking' with multiplex continuous, where we find the verb *ɔ̀dà* 'to fetch' used instead of the verb *ɔ̀y* 'to gather'. Second, if the object's position is not upright, the same rule again applies both for the selection of posture verb and the selection of the verb for 'put/take/fall'. However, in the case of 'putting', a further distinction is made for single uniplex objects, where *lā* is used instead of *ùù*. Finally, if an object is in upright position, the selection criterion is based on whether or not the object has a base (as discussed in Section 3.4). This rule, crucial for an understanding of posture verb, is not applicable in the selection of the verb for 'put/take/fall', and as a result no distinction is made between 'setting' and 'standing'.

6. Conclusion

From the above discussion it is evident that the notions 'sitting', 'standing', and 'lying' play a major role in determining the form of posture verbs, auxiliaries, adverbs for 'here/there', demonstratives, and to a lesser degree, the verbs of 'putting/taking/falling'. The rules for determining the choice of posture verbs are identical to the rules for determining the choice of posture auxiliary, demonstrative, and adverb. Two of these rules also appear to be used in determining the choice of verb for 'putting/taking/falling', while a third principle, important in the selection of posture verb, does not seem to be relevant to the choice of verb for 'putting/taking/falling'.

In some ways Mbay posture verbs appear to be fairly well developed. Kuteva (1999) and Lichtenberk (this volume) suggest that the use of posture verbs as auxiliaries will develop only after they are used in locative/existential expressions, which in turn presupposes their use as posture verbs. The Mbay posture verbs have all three uses, and have acquired two additional uses: as adverbs and as demonstratives. The morphological shape of the demonstratives suggests their derivation from adverbs, but other than this I am aware of no evidence regarding the relative development of the numerous uses of the posture verbs.

In other ways Mbay posture verbs are not complex. In none of their uses is a distinction made between being in a position and assuming that position. This differs from languages such as Trumai (Guiradello-Damian, this volume). The aspectual use of the three posture verbs is identical, whereas in languages such as Manam and Numbami (Lichtenberk, this volume) the different verbs have distinct aspectual uses. Finally, it appears that the physical shape of the object (flat, long, and narrow) and its vertical/horizontal orientation are relatively unimportant in

determining the choice of posture verb. Instead, the important factors are the plexity of the object, whether it is upright, and whether it has a base.

Abbreviations

EC=end of clause marker; LOC=locative; AUX=auxiliary verb; PL=plural (both for noun and verb); QU=question.

Notes

1. Mbay is a Central-Sudanic language of the Nilo-Saharan family. There are approximately 100,000 speakers living principally in south-central Chad and neighboring portions of northern Central African Republic. My research for this chapter was conducted in Chad over the period 1988–1990, with additional work done during 1977–1979. Support for this research was provided by the National Science Foundation (BNS-8719753).

The symbol $_$ is used to indicate that a vowel is nasalized. Nasalized vowels immediately following a nasal consonant are not marked.

2. A more colloquial translation of this expression might be ‘This is the best I can do under the circumstances’.

3. Note that the preposition $k\grave{a}$ in these examples becomes $s\grave{i}$ - before the third-person singular pronominal suffix, and $s\grave{e}$ - before the other pronominal suffixes.

4. The word-for-word translation here is confusing: $ng\grave{a}d\grave{a}$ is a noun, ‘the act of running’, whereas $\grave{a}y$ is the verb ‘to run’.

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CHAPTER 14

The posture verbs in Korean

Basic and extended uses*

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1. Introduction

The objective of this chapter is to describe the basic syntax and semantics of four posture verbs, *se-* ('stand'), *anc-* ('sit'), *nwup-* (plain 'lie') and *cappaci-* (vulgar 'lie') in Korean, and also to study extended uses based on the human bodily postures denoted by these verbs. In Korean, there seems to be a clear division between the posture verb 'stand' on the one hand and the posture verbs 'sit' and 'lie' on the other. The former can be extended to encode the spatial position of inanimate *as well as* animate entities, whereas the latter cannot likewise be utilized but can only be extended to encode the spatial position of animate entities. Moreover, the same bifurcation, albeit in an opposite manner, is observed in terms of aspectual extension. Thus, the posture verbs 'sit' (i.e. *anc-*) and 'lie' (i.e. *cappaci-*) have both been grammaticalized as progressive-aspect-bearing auxiliary verbs, whereas the posture verb 'stand' (i.e. *se-*) can never be utilized to express progressive aspect. In this chapter, an attempt will be made to explore the conceptual basis for these differences in posture-based and aspectual extensions between the two groups of posture verbs in Korean. It will be demonstrated that the basis for the use of the posture verb *se-* 'stand' in the encoding of the spatial position of animate and inanimate entities is not so much sensorimotor control or postural affinity as height relative to that of humans. Moreover, it will be suggested that the posture verbs 'sit' and 'lie' (vulgar), but not 'stand', can be extended to express progressive aspect, because the postural positions denoted by the former verbs are stationary, whereas that denoted by the latter verb is *potentially* non-stationary in the sense that standing "is a prerequisite for (non-stationary activities such as) walking, running, etc." (Newman, this volume; Heine 1993; Bybee, Perkins, and Pagliuca 1994). Attention will also be drawn to the fact that in Korean the posture verb 'lie' (vulgar) can function as a progressive-aspect-bearing auxiliary verb, although it cannot be extended to

encode canonically the spatial position of inanimate entities. This calls into question Kuteva's (1999:205) suggestion that "the first prerequisite for the posture-verb structure to start along the path of (aspectual) auxiliatation is the use of the posture verbs as unmarked/canonical encodings of the spatial position of physical objects." Finally, the use of the Korean posture verbs 'stand', 'sit', and 'lie' to depict professions or institutionalized activities will briefly be discussed (cf. Van Oosten 1986:147–8).

2. The posture verbs 'stand', 'sit', and 'lie': posture-based extension

The four posture verbs 'stand', 'sit', 'lie' (plain), and 'lie' (vulgar) will first be examined with a view to identifying which of them can encode the spatial position of animate and/or inanimate entities in addition to that of human entities, and also to describing the limits of their posture-based extension.

2.1. The posture verb *se*- 'stand'

In conjunction with the verb of existence *iss*-, the posture verb *se*- 'stand' forms the basis for the encoding of the spatial position of humans and animals, as can be seen from (1) and (2):¹

- (1) ku haksayng-i mwun-yeph-ey se-iss-ta
the student-NOM door-side-LOC stand-is-IND
'The student is standing by the door.'
- (2) ku mal-i makwukan-aph-ey se-iss-ta
the horse-NOM stable-front-LOC stand-is-IND
'The horse is standing in front of the stable.'

Note, however, that, although the posture verb 'stand' can freely be used in relation to humans, it cannot always encode the spatial position of animals, as seen in (3) and (4) (cf. (2)).

- (3) *ku kay-ka mwun-yeph-ey se-iss-ta
the dog-NOM door-side-LOC stand-is-IND
'The dog is standing by the door.'
- (4) *ku cwui-ka changmwun-yeph-ey se-iss-ta
the rat-NOM window-side-LOC stand-is-IND
'The rat is standing by the window.'

The sentences in (3) and (4) can be rendered grammatical by eliminating the posture verb *se*- from the verb complex, *se-iss-ta*. Thus, use of the simple verb of

existence *iss-* is sufficient to specify the location of the dog or the rat, as can be seen in (5) and (6).

- (5) ku kay-ka mwun-yeph-ey iss-ta
the dog-NOM door-side-LOC is-IND
'The dog is by the door.'
- (6) ku cwui-ka changmwun-yeph-ey iss-ta
the rat-NOM window-side-LOC is-IND
'The rat is by the window.'

When applied to the spatial position of inanimate entities, the posture verb 'stand' does also not always produce grammatical sentences. Compare:

- (7) ku kenmwul-i namdaymwun-yeph-ey se-iss-ta
the building-NOM South.Gate-side-LOC stand-is-IND
'The building stands next to the South Gate [one of the primary landmarks in Seoul].'
- (8) *ku hoapwun-i cengmwun-yeph-ey se-iss-ta
the flower.pot-NOM main.gate-side-LOC stand-is-IND
'The flowerpot stands next to the main gate.'

Again, the ungrammatical sentence in (8) can be converted into a grammatical one by eliminating the posture verb from the verb complex *se-iss-ta*. The grammatical sentence in (7) can optionally also appear without the posture verb *se-*'stand'.

2.2. The posture verb *anc-* 'sit'

The basic use of the posture verb *anc-* 'sit', in conjunction with the verb of existence *iss-*, is demonstrated by the following examples, in which human entities are described as being in a sitting position.

- (9) ku haksayng-i chayksang-aph-ey anc-e-iss-ta
the student-NOM desk-front-LOC sit-F-is-IND
'The student is sitting at the desk.'
- (10) ku koahakca-ka yenkwusil-ey anc-e-iss-ta
the scientist-NOM lab-LOC sit-F-is-IND
'The scientist is sitting in the lab.'

The posture verb 'sit' can be extended to the encoding of the spatial position of other animate entities, but generally not to that of inanimate entities.² This is clearly demonstrated by (11), (12), (13), and (14).

- (11) ku kay-ka mwun-yeph-ey anc-e-iss-ta
the dog-NOM door-side-LOC sit-F-is-IND
'The dog is sitting by the door.'
- (12) ku hoangso-ka mwun-aph-ey anc-e-iss-ta
the ox-NOM door-front-LOC sit-F-is-IND
'The ox is sitting in front of the door.'
- (13) *ku hoapwun-i mwun-yeph-ey anc-e-iss-ta
the flower.pot-NOM door-side-LOC sit-F-is-IND
'The flowerpot sits by the door.'
- (14) *ku khomphyutha-ka chayksang-wui-ey anc-e-iss-ta
the computer-NOM desk-top-LOC sit-F-is-IND
'The computer sits on the desk.'

The ungrammaticality of (13) and (14) is caused by use of the posture verb 'sit' alone. As with the other previous ungrammatical examples, these sentences can be turned into grammatical ones if the posture verb 'sit' is deleted from the verb complex *anc-e-iss-ta*.

2.3. The posture verbs *nwup-* and *cappaci-* 'lie'

The two posture verbs *nwup-* 'lie' (plain) and *cappaci-* 'lie' (vulgar), in conjunction with the verb of existence *iss-*, can be applied to the encoding of the spatial position of human and animate entities, as in (15) and (16), but not to that of inanimate entities, as in (17) and (18).

- (15) ku salam-i pang-ey nwuwu/cappaci-e-iss-ta
the man-NOM room-LOC lie.PLAIN/lie.VULGAR-F-is-IND
'The man is lying in the room.'
- (16) ku koyangi-ka mwun-yeph-ey nwuwu/cappaci-e-iss-ta
the cat-NOM door-side-LOC lie.PLAIN/lie.VULGAR-F-is-IND
'The cat is lying by the door.'
- (17) *ku namwu-ka cengwuen han kwusek-ey
the tree-NOM garden one corner-LOC
nwuwu/cappaci-e-iss-ta
lie.PLAIN/lie.VULGAR-F-is-IND
'The tree lies (fallen) in one corner of the garden.'
- (18) *ku cenki-suthayntu-ka chayksang-wui-ey nwuwu/cappaci-e-iss-ta
the electric-lamp-NOM desk-TOP-LOC lie.PLAIN/lie.VULGAR-F-is-IND
'The electric lamp lies (fallen) on the desk.'

The ungrammatical sentences in (17) and (18) can both be rendered grammatical by simply deleting the posture verb ‘lie’ from the verb complex *nwuwu/cappaci-e-iss-ta*. Note, however, that the ungrammatical sentences in (17) and (18), unlike those in (3), (4), (8), (13), and (14), are intended to encode an unnatural spatial position of the inanimate entities in question. Normally, trees or electric lamps are vertically, rather than horizontally, positioned on a solid surface. Thus, in order to encode the ‘marked’ spatial orientation of the inanimate entities in (17) and (18), a different verb, *ssuleci-* ‘fall’, may be used in conjunction with the verb of existence *iss-*, as in (19) and (20).

- (19) ku namwu-ka cengwuen han kwusek-ey ssuleci-e-iss-ta
 the tree-NOM garden one corner-LOC fall-F-IS-IND
 ‘The tree has fallen in one corner of the garden.’
- (20) ku cenki-suthayntu-ka chayksang-wui-ey ssuleci-e-iss-ta
 the electric-lamp-NOM desk-top-LOC fall-F-IS-IND
 ‘The electric lamp has fallen on the desk.’

2.4. The posture verbs in the existential construction

It is worthwhile mentioning at this point that the posture verbs ‘stand’, ‘sit’, and ‘lie’ can also appear in the existential construction with the same restrictions observed above in terms of spatial encoding. For example, the posture verb ‘stand’ can be used in the existential construction with respect to some, but not other, animate or inanimate entities. Thus, if the posture verb ‘stand’ is not used to describe the spatial position of an animate or inanimate entity, it cannot also be used in the existential construction with respect to that animate or inanimate entity. In relation to humans, on the other hand, use of the posture verb ‘stand’ is not restricted at all in the existential construction.

- (21) cip-aph-ey acwumeni han pwun-i se-keysi-ta
 house-front-LOC lady one CL-NOM stand-is.HON-IND
 ‘There is a lady (standing) in front of the house.’
- (22) kongwuen-ey mal han mali-ka se-iss-ta
 park-LOC horse one CL-NOM stand-is-IND
 ‘There is a horse (standing) in the park.’
- (23) hakkyo cengmwun-yeph-ey kinyem-sang-i hana
 school main.gate-side-LOC commemorative-statue-NOM one
 se-iss-ta
 stand-is-IND
 ‘There is one commemorative statue (standing) next to the main gate of the school.’

- (24) *pwuekh-ey kay han mali-ka se-iss-ta
 kitchen-LOC dog one CL-NOM stand-is-IND
 'There is a dog (standing) in the kitchen.'
- (25) *sikthak-wui-ey hoapyeng hana-ka se-iss-ta
 dining.table-top-LOC vase one-NOM stand-is-IND
 'There is a vase (standing) on the dining table.'

The posture verbs 'sit' and 'lie' do also participate in the existential construction, but, as expected, only in relation to human and animate entities. This is demonstrated by the following three examples.

- (26) wuli cip malwu-ey eten salam-i
 our house floor-LOC unknown man-NOM
 anc/nwuwu/cappaci-e-iss-ta
 sit/lie.PLAIN/lie.VULGAR-F-is-IND
 'There is a man (sitting/lying/lying) on the floor of our house.'
- (27) wuli cip malwu-ey koyangi han mali-ka
 our house floor-LOC cat one CL-NOM
 anc/nwuwu/cappaci-e-iss-ta
 sit/lie.PLAIN/lie.VULGAR-F-is-IND
 'There is a cat (sitting/lying/lying) on the floor of our house.'
- (28) *wuli cip malwu-ey hoapwun hana-ka
 our house floor-LOC flower.pot one-NOM
 anc/nwuwu/cappaci-e-iss-ta
 sit/lie.PLAIN/lie.VULGAR-F-is-IND
 'There is a flowerpot (sitting/lying/lying) on the floor of our house.'

2.5. Summary

The posture verb *se-* 'stand' can be applied to the encoding of the spatial position of animate and inanimate entities. There seems to be a restriction on its posture-based extension, however. The posture verb 'stand' can thus describe the spatial position of some, but not other, animate or inanimate entities. The posture verb 'lie', on the other hand, can be extended to encode the spatial position of animate entities, but not that of inanimate entities. For the posture verb 'lie', then, there is no posture-based extension to the encoding of the spatial position of inanimate entities. This is more or less true of the other posture verb 'sit' as well (cf. note 3).

3. The posture-based extension of the verb 'stand'

The contrast between the posture verb 'stand' and the posture verbs 'sit' and 'lie' in terms of posture-based extension may suggest that the degree of sensorimotor control manifested in the bodily positions of standing, sitting, and lying has a bearing upon the distribution of the posture verb 'stand'. Standing requires the maximum level of control, because both the upper and lower torsos must be held vertical and sturdy; lying requires no such control, because the whole body is at rest on a horizontal surface; and sitting is somewhere between standing and lying in that the upper torso must be kept erect with the lower torso at rest. This degree of control inherent in the three postural positions is captured neatly by the hierarchy in (29).

- (29) 'stand' > 'sit' > 'lie'
 >=requires more sensorimotor control than

On closer inspection, however, the degree of sensorimotor control cannot be responsible for the distribution of the posture verb 'stand' in question. Inanimate entities by definition lack sensorimotor control. Thus, if any of the posture verbs were to be extended to encode the spatial position of inanimate entities, the posture verb 'stand', ranked the highest in the continuum of control in (29), would be the least likely candidate. The posture verb 'lie', with its lowest level of control, is the most likely to be conscripted for the posture-based extension.

More importantly, the fact that the posture verb 'stand' does not apply across the board to animate or inanimate entities, as in (2), (3), (7) and (8) repeated below, indicates clearly that the degree of sensorimotor control has no bearing upon the distribution of the posture verb 'stand'.

- (2) ku mal-i makwukan-aph-ey se-iss-ta
 the horse-NOM stable-front-LOC stand-is-IND
 'The horse is standing in front of the stable.'
- (3) *ku kay-ka mwun-yeph-ey se-iss-ta
 the dog-NOM door-side-LOC stand-is-IND
 'The dog is standing by the door.'
- (7) ku kenmwul-i namdaymwun-yeph-ey se-iss-ta
 the building-NOM South.Gate-side-LOC stand-is-IND
 'The building stands next to the South Gate [one of the primary landmarks in Seoul].'
- (8) *ku hoapwun-i cengmwun-yeph-ey se-iss-ta
 the flower.pot-NOM main.gate-side-LOC stand-is-IND
 'The flowerpot stands next to the main gate.'

The building in (7) and the flowerpot in (8) resemble each other in that they both completely lack such control. Nonetheless, (7) is grammatical, but (8) is not. There is also no difference in control between the horse in (2) and the dog in (3). Presumably, horses and dogs, with their bodies supported by four legs, have more or less the same level of sensorimotor control. Thus, the degree of sensorimotor control has nothing to do with the posture-based extension of the verb ‘stand’.

Physical affinity between humans on the one hand, and animate and inanimate entities on the other, also is unable to explain the difference in grammaticality between (7) and (8), and between (2) and (3). The inanimate entities in (7) and (8), for instance, can both be construed as ‘standing’ on their base, just as humans stand on their feet. Indeed, buildings and flowerpots, like humans in a standing position, do both exhibit vertical, as opposed to horizontal, orientation. Nonetheless, (7) is grammatical, whereas (8) is not. A similar comment can be made of (2) and (3). Both horses and dogs can easily be construed as standing on their feet, as humans do, although the number of feet involved may be different. However, the posture verb ‘stand’ can be used in conjunction with horses, not with dogs. Thus, something in addition to, or other than, vertical orientation must be at work in the posture-based extension of the verb ‘stand’ in Korean.³

The basis for this ‘selective’ posture-based extension of the verb ‘stand’ in Korean seems to be the height of a given entity *relative* to that of humans, that is, vertical orientation in comparison with that of humans. In other words, the height of animate and inanimate entities should be at least comparable to that of humans — that is, almost as tall as, or taller than, humans — if their spatial positions are to be described by means of the posture verb ‘stand’. This explains, for instance, why the posture verb ‘stand’ applies to some animals such as horses, but not to other animals such as dogs. Generally, horses are taller, and dogs are shorter, than humans. This also takes account of the fact that tall inanimate entities such as buildings can be described by the posture verb ‘stand’, whereas short inanimate entities such as flowerpots cannot.⁴

This notion of relative height can also explain the posture-based extension of the verb ‘stand’ to animals: the height of animals when standing on their hind legs is comparable to that of humans. Consider:

- (30) ku kom-i mwun-aph-ey se-iss-ta
 the bear-NOM door-front-LOC stand-is-IND
 ‘The bear is standing in front of the door.’

The sentence in (30) does not mean that the bear is ‘standing’ on its four legs, but that it is standing up on its hind legs (i.e. bipedally). The bear, on its four legs, may normally be shorter in terms of vertical orientation than humans. But the bear, on its hind legs, may well stand as tall as, or even taller than, humans. Note that an instrumental phrase, *twu pal-lo* ‘with two legs’, may be added to (30) to

make it explicit that the bear is standing up on its hind legs, as in (31). Note, however, that this instrumental phrase is merely optional.

- (31) ku kom-i mwun-aph-ey twu pal-lo se-iss-ta
 the bear-NOM door-front-LOC two foot-INST stand-is-IND
 'The bear is standing on its hind legs in front of the door.'

Small animals such as dogs or rats can also stand up on their hind legs (e.g. a 'party trick' for some dogs). They are not comparable to humans in terms of height even when standing up on their hind legs, however. This may explain why (3) and (4) are ungrammatical and also why the instrumental phrase, *twu pa-lo*, must be used when the situation in which these animals are standing up on their hind legs is described, as in (32) and (33).

- (32) ku kay-ka mwun-yeph-ey twu pal-lo se-iss-ta
 the dog-NOM door-side-LOC two foot-INST stand-is-IND
 'The dog is standing (up) on its hind legs by the door.'
- (33) ku cwui-ka changmwun-yeph-ey twu pal-lo se-iss-ta
 the rat-NOM window-side-LOC two foot-INST stand-is-IND
 'The rat is standing (up) on its hind legs by the window.'

Note that sentences such as (32) and (33) cannot be used in support of the physical affinity between the standing position of humans and that of animals as the conceptual basis for the extension to animate entities of the posture verb 'stand'. This is so, because the posture verb 'stand' alone cannot perform the task of expressing the 'standing' posture of the dog in (32) but only in conjunction with the instrumental phrase, *twu pal-lo*. Thus, the posture verb 'stand' alone cannot be extended to the encoding of the spatial position of animals such as dogs or rats.⁵

Finally, it will be interesting to determine how the posture verb 'stand' in Korean behaves where the disparity in scale between a given entity and its location is substantial, there being cross-linguistic evidence that this kind of difference may also have a bearing on the use of posture verbs. In Dutch, for example, a choice between the posture verbs *staan* 'stand' and *liggen* 'lie' has to be made, depending upon the size of the location as opposed to that of the entity the spatial position of which is described. Compare:

- (34) Ons huis staat op een hoek.
 our house stand on a corner
 'Our house is on a corner.'
- (35) Ons huis ligt in Amstelveen.
 our house lie in Amstelveen
 'Our house is in Amstelveen [a city].'

According to Van Oosten (1986: 138, 145–6), the location in which the house is situated in (34) is such that the house itself is “rather tall, supports itself and is in a canonical position”, whereas the location in which the house is situated in (35) is so vast and extensive that the latter “represents only a point; as such it has no height, and the question of its rigidity (i.e. vertical orientation) is irrelevant” (Van Oosten 1986: 146). This difference in turn is reflected by the alternation between *staan* and *liggen* in Dutch. In Korean, as expected, the posture verb ‘stand’ can easily be used for a situation like (34) (i.e. (36)), but it cannot likewise be used for a situation denoted by (35) (i.e. (37)). (The ungrammatical sentence in (37) can only be rendered grammatical by removing the posture verb from the verb complex, *se-iss-ta*.)

- (36) wuli cip-un kil mothwungi-ey se-iss-ta
 our house-TOP street corner-LOC stand-is-IND
 ‘Our house stands on a (street) corner.’

- (37) *wuli cip-un sewul-ey se-iss-ta
 our house-TOP Seoul-LOC stand-is-IND
 ‘*Our house stands in Seoul.’

This may lead one to argue that the height of a given entity, be it animate or inanimate, relative to that of humans may not be the only determining factor in the posture-based extension of the verb ‘stand’ in Korean. Following Van Oosten (1986: 146), however, it must be pointed out that in (37) the house is construed only as a point on the vast expanses of a city (very much like a dot on a map), whereby its vertical orientation is rendered irrelevant or completely suppressed. In (37), therefore, the question of the height of the house actually does not arise.⁶

4. The aspectual extension of the posture verbs ‘sit’ and ‘lie’

Studies in grammaticalization (Heine *et al.* 1991a and b; Heine 1993; Bybee *et al.* 1994; Kuteva 1999, 2001; this volume *inter alia*) have identified the cross-linguistic tendency for a posture verb ‘stand’, ‘sit’, or ‘lie’ to be pressed into service to express progressive aspect. For example, Lichtenberk (1983: 197–8) demonstrates that in Manam *soaʔi* ‘sit’ is utilized to express progressive aspect in conjunction with the main verb in a reduplicated form.

- (38) siresire di-bulabula-í-be di-sóaʔi
 grass 3PL.REALIS-set-RDP-3SG-and 3PL.REALIS-sit
 ‘They are burning grass.’

Heine *et al.* (1993:192) also mention languages such as Diegueño, in which the posture verb ‘stand’ is extended to express progressive aspect (also Langdon 1970:168).

- (39) ’a.yp ta’yu.w
I.talk I’m.standing
‘I’m talking.’

Moreover, Heine *et al.* (1993:131–2) point to Tatar as a language in which the posture verb ‘lie (down)’ is utilized to encode progressive aspect (also Poppe 1968:101).

There has been a good deal of discussion in the literature as to how posture verbs can develop into markers of progressive aspect (Blansitt 1975; Comrie 1976; Heine and Reh 1984; Heine *et al.* 1991a and b; Bybee *et al.* 1994; Kuteva 1999 and 2001 *inter alia*). This will not be repeated here in the interests of space, except for highlighting the conceptual basis for the development of progressive markers from posture verbs. The primary function of progressive aspect is “to give the location of an agent as in the midst of an activity” (Bybee *et al.* 1994:133). If, for example, X is eating, X is regarded as being located in the midst of eating; ongoing activities are construed as locations in which agents find themselves in (e.g. *They are in the middle of lunch*). Thus, Bybee *et al.* (1994:127–37) suggest that location is a necessary semantic component of progressive aspect. Posture verbs denote bodily positions which the whole body is literally situated or locked in. For instance, X, in a sitting position, is construed to be located in a particular posture, just as, in the case of progressive aspect, an agent is construed to be located in the midst of an activity. This conceptual similarity may be what motivates posture verbs to (have) develop(ed) into progressive-aspect-bearing elements in many languages of the world. This development may thus involve a metaphorical process whereby the abstract meaning of progressive aspect is conceptualized in terms of the concrete meaning of bodily postures (e.g. Heine *et al.* 1991b).

4.1. The posture verbs ‘sit’ and vulgar ‘lie’ as markers of progressive aspect

In Korean, the posture verbs ‘sit’ and vulgar ‘lie’ are utilized to express progressive aspect, as is illustrated below.

- (40) ku salam-un pwulpyeng ha-ko anc-e-iss-ta
the man-TOP complaint do-CONJ sit-F-IS-IND
‘The man is complaining.’
- (41) ku salam-un pwulpyeng ha-ko capacci-e-iss-ta
the man-TOP complaint do-CONJ lie.VULGAR-F-IS-IND
‘The man is complaining.’

The sentences in (40) and (41) both also involve the so-called K-conjunctive device, *-ko* (cf. Lukoff 1982:364, Song 1991:208). In these sentences, the posture verbs ‘sit’ and vulgar ‘lie’ are conjoined directly with the other verb *pwulpyeng ha-* ‘complain’ by means of the conjunctive device *-ko*. The original function of this conjoined structure is to encode two temporally ordered or simultaneous events. Thus, (40), for example, can also mean: ‘The man complains, and then sits down’ or ‘The man sits down while complaining’. This conjoined structure has been grammaticalized to the effect that in (40) and (41) the posture verbs can function as progressive-aspect-bearing auxiliary verbs (e.g. Heine 1993), with the other verb, *pwulpyeng ha-* ‘complain’, as the main verb. This is what Kuteva (1999) refers to as “auxiliation” of posture verbs for purposes of aspect marking. Note that in Korean the posture verbs ‘sit’ and vulgar ‘lie’ can be used as progressive-aspect-bearing auxiliary verbs only in relation to human and animate agents, because these verbs, unlike the posture verb ‘stand’, cannot be utilized in relation to inanimate entities (see 2.2 and 2.3).

In addition to aspectual semantics, there are a number of ways in which the posture verbs in (40) and (41), as progressive-aspect-bearing auxiliary verbs, behave differently from when they encode bodily postures. First, the main verb may denote a physical activity which is impossible to carry out in the sitting or lying position which would otherwise be denoted by a posture verb ‘sit’ or ‘lie’, respectively. Consider:

- (42) oay ne-nun mayn nal ttwuimcil man ha-ko anc-e-iss-nya
 why you-TOP every day running only do-CONJ sit-F-is-Q
 ‘Why are you doing nothing but running every day?’
- (43) oay ne-nun mayn nal ttwuimcil man ha-ko
 why you-TOP every day running only do-CONJ
 cappaci-e-iss-nya
 lie.VULGAR-F-is-Q
 ‘Why are you doing nothing but running every day?’

It is physically impossible to run in a sitting or lying position! One has to be on one’s feet in order to be able to run. Nonetheless, both (42) and (43) are fully grammatical and acceptable. Clearly, the posture verbs ‘sit’ and ‘lie’ have lost their original postural meanings when expressing progressive aspect as in (42) and (43).⁷

Further evidence can be adduced from the fact that the posture verbs ‘sit’ and ‘lie’ cannot be ‘focused’ by means of questions when they express progressive aspect. This can indirectly be deduced from (44).

- (44) A: ku salam-un pwulpyeng ha-ko anc-e-iss-ta
 the man-TOP complaint do-CONJ sit-F-is-IND
 ‘The man is complaining.’

- B: pwulpyeng ha-ko mwues-ul han-ta-ko?
 complaint do-CONJ what-ACC do-IND-QT
 'He complains, and does what, you said?'
 A: ani nul pwulpyeng ha-ko-iss-ta-ko
 no always complaint do-NR-IS-IND-QT
 'No, I said he is always complaining.'

In (44), Speaker A means that the man is complaining (i.e. the posture verb 'sit' expressing progressive aspect), but Speaker B fails to receive Speaker A's initial message in full, thereby misinterpreting it (i.e. the posture verb as one of the two main verbs in the *ko*-conjoined structure, whereby the bodily posture of the agent is expressed). Speaker A then corrects Speaker B's misinterpretation by rephrasing his or her earlier sentence in order to explain that the complaining is an on-going event at the time of reference (in this case, at the time of speech). In (45), on the other hand, the posture verb 'sit', being focused, cannot be interpreted to encode the progressive but the man's sitting position.

- (45) A: ku salam-un pwulpyeng ha-ko mwues-ul
 the man-TOP complaint do-CONJ what-ACC
 ha-nya?
 do-Q
 'The man complains, and then what does he do?' or
 'What does the man do while complaining?'
 B: pwulpyeng ha-ko anc-e-iss-ta
 complaint do-CONJ sit-F-IS-IND
 'He complains, and then sits down.' or
 'He sits down while complaining.'

Another piece of evidence for a posture verb 'sit' or 'lie' functioning as a progressive-aspect-bearing auxiliary verb arises from so-called VP anaphora, *ku-lehkey ha-* 'do so'. This is a phenomenon similar to the *do so* construction in English. Consider:

- (46) kiho-ka ku chayk-ul ilk-ess-ko cini-to kulehkey
 Keeho-NOM the book-ACC read-PST-CONJ Jinee-also so
 ha-ess-ta
 do-PST-IND
 'Keeho read the book, and Jinee did so, too.'

In (46), the VP anaphora, *kulehkey ha-*, refers back to *ku chayk-ul ilk-* 'read the book'. However, the VP anaphora cannot refer to the main verb when a posture verb 'sit' or 'lie' is utilized as a progressive-aspect-bearing auxiliary verb, as in (47).

- (47) *ku salam-un pwulpyeng ha-ko anc-e-iss-ko
 the man-TOP complaint do-CONJ sit-F-is-CONJ
 ku yeca-to kulehkey ha-ko anc-e-iss-ta
 the woman-also so do-CONJ sit-F-is-IND
 'The man is complaining, and so is the woman.'

The sentence in (47) is only acceptable in the sense that: 'The man complains and then sits down, and the woman also does so, and then sits down', or 'The man sits down while complaining, and the woman sits down while doing so'. The point is that, with the VP anaphora in the second conjunct referring back to *pwulpyeng ha-* in the first conjunct, the two instances of the posture verb 'sit' in (47) should refer only to the bodily posture of sitting. In other words, the VP anaphora cannot replace the main verb (i.e. lexical) alone, leaving the auxiliary verb (i.e. grammatical) intact. In the conjoined structure, on the other hand, it can replace either one or both of the two main verbs.

The last piece of evidence for the posture verbs 'sit' and 'lie' as markers of progressive aspect can be adduced from so-called subject honorification. In Korean, the speaker must show his or her deference to the subject human nominal (more appropriately the referent of the subject human nominal who deserves the speaker's respect) by registering the honorific suffix *-(u)si* in the verb. For instance, (48a) is grammatical with the honorific suffix appearing in the verb, since the subject is worthy of the speaker's deference. In contrast, (48b) is ungrammatical, because the subject is not worthy of such respect, although the direct object certainly is so.

- (48) a. halapeci-kkeyse ai-lul ttayli-si-ess-ta
 grandfather-NOM.HON child-ACC hit-HON-PST-IND
 'Grandfather hit the child.'
 b. *ai-ka halapeci-lul ttayli-si-ess-ta
 child-NOM grandfather-ACC hit-HON-PST-IND
 'The child hit Grandfather.'

When a posture verb 'sit' or 'lie' is used in conjunction with another verb in the *ko*-conjoined structure to encode the bodily posture, not progressive aspect, the honorific suffix must be added not only to the posture verb but also to the other verb in the conjoined structure, as can be seen in (49). (Note that the verb of existence must appear in honorific form, *keysi-*, which also contains the honorific suffix, *-si*.)

- (49) halapeci-kkeyse hangsang pwulpyeng ha-si-ko
 grandfather-NOM.HON always complaint do-HON-CONJ
 anc-e-keysi-ta
 sit-F-is.HON-IND
 'Grandfather always complains and then sits down.' or
 'Grandfather always sits down while complaining.'

However, when a posture verb 'sit' or 'lie' is utilized to express progressive aspect, the honorific suffix must occur only once on the verb complex as a whole, not on the posture verb and also on the other verb with which it forms the verb complex; in the present case, the honorific form of the verb of existence must only once appear to the right of the posture verb 'sit'. Compare:

- (50) a. halapeci-kkeyse hangsang pwulpyeng ha-ko
 grandfather-NOM.HON always complaint do-CONJ
 anc-e-keysi-ta
 sit-F-is.HON-IND
 'Grandfather is always complaining.'
- b. *halapeci-kkeyse hangsang pwulpyeng ha-si-ko
 grandfather-NOM.HON always complaint do-HON-CONJ
 anc-e-keysi-ta
 sit-F-is.HON-IND
 'Grandfather is always complaining.'

The sentence in (50b) is acceptable only if it means: 'Grandfather always complains, and then sits down' or 'Grandfather always sits down, while complaining.' Incidentally, this is comparable to the distribution of the honorific suffix used in conjunction with the terminative-aspect-bearing auxiliary verb *pe-li-*, the original meaning of which is 'to throw away', or 'to discard'. Consider:

- (51) halapeci-kkeyse yenkum-ul ta ssu-e-peli-si-ess-ta
 grandfather-NOM.HON pension-ACC all spend-F-discard-HON-PST-IND
 'Grandfather spent all of his pension.'

In (51), *pe-li-* has no traces of its original meaning but as an auxiliary verb expresses terminative aspect. Note that the honorific suffix cannot be attached to the end of the verb *ssu-* 'to spend', as in (52), because (51) does not involve two main verbs in a conjoined structure. The honorific suffix can only once be attached to the end of the auxiliary verb *pe-li-*, or, more accurately, to the end of the whole verb complex (i.e. the main verb plus the auxiliary verb).

- (52) *halapeci-kkeyse yenkum-ul ta
 grandfather-NOM.HON pension-ACC all
 ssu-si-e-peli-si-ess-ta
 spend-HON-F-discard-HON-PST-IND
 'Grandfather spent all of his pension.'

Finally, there is also evidence that Korean speakers seem to be conscious of the aspectual extension of the posture verb 'sit'. This is clearly manifested in the following common verbal exchange between speakers:

- (53) A: wus-ki-ko anc-e-iss-ney
 laugh-cause-CONJ sit-F-is-IND
 ‘You are making me laugh.’ or
 ‘You got to be kidding’ or ‘You must be out of your mind.’
 B: nay-ka se-iss-ci anc-e-iss-nya?
 I-NOM stand-is-SUP sit-F-is-Q
 ‘I am in a standing position; am I in a sitting position?’ or
 ‘I am in a standing, not sitting, position.’

In (53), Speaker A is accusing Speaker B of making a ludicrous comment or suggestion, for instance. Note, however, that Speaker B immediately refutes Speaker A’s accusation by saying that Speaker B is in a standing, not sitting, position. What is intriguing about (53) is that Speaker B, though fully aware of the aspect-marking function of the posture verb ‘sit’ in Speaker A’s sentence, is deflecting Speaker A’s accusation by protesting that it cannot be valid because Speaker A is making a factually incorrect statement even about Speaker B’s bodily posture! Incidentally, the example in (53) highlights the tendency of the Korean posture verb ‘sit’ or ‘lie’ to be used to express the progressive in the context of the speaker’s negative assessment of others’ activities (see below for further discussion).

4.2. The conceptual basis of the aspectual extension of ‘sit’ and vulgar ‘lie’

Though the posture verb ‘sit’ and the vulgar form of the posture verb ‘lie’ may participate in the aspectual extension, the posture verb ‘stand’ is not at all utilized to express progressive aspect in Korean. Nor is the plain form of the posture verb ‘lie’. Compare (40) and (41) with (54) and (55).

- (54) *ku salam-un pwulpyeng ha-ko se-iss-ta
 the man-TOP complaint do-CONJ stand-is-IND
 ‘The man is complaining.’
 (55) *ku salam-un pwulpyeng ha-ko nwuwu-e-iss-ta
 the man-TOP complaint do-CONJ lie.PLAIN-F-is-IND
 ‘The man is complaining.’

The sentences in (54) and (55) are acceptable only if they are interpreted to encode two temporally ordered or simultaneous events: ‘The man complains, and then stands up/The man stands up while complaining’, or ‘The man complains, and then lies down/The man lies down while complaining’, respectively. These sentences raise two obvious questions, however. First, why is it that the posture verb ‘stand’ is not at all extended to the expression of progressive aspect, when the other posture verbs ‘sit’ and ‘lie’ are (i.e. (40) and (41) vs (54))? Second, why is it

that there is a difference in terms of the aspectual extension between the vulgar and plain forms of the same posture verb 'lie' (i.e. (41) vs (55))?

The first question can be approached by pointing out that standing, as opposed to sitting or lying, is *potentially* non-stationary in the sense that it "is a prerequisite for [non-stationary activities such as] walking, running, etc." (Newman, this volume). There are many activities that humans cannot perform unless they assume a standing position. But there are few human activities that can be performed only in a sitting or lying position. For example, although humans normally sleep in a lying position, they are also known to be able to sleep while sitting or even standing. However, humans are plainly incapable of walking or running in a sitting or lying position. Indeed, if X, in a sitting or lying position, wants to walk or run from A to B, X must first assume a standing position in order to start walking or running. Standing thus tends to be more of a transitional activity that leads up to other activities, e.g. walking or running, than of an activity in itself. So much so, that even activities associated closely with standing involve much more than just standing. For example, humans may stand waiting for other humans. In this situation, they do not stand still on the spot, but they tend to walk about or to lean against something, for instance. This may be so, because "the standing position, without any additional support, is the one which humans are least able to maintain for long periods of time" (Newman, this volume, p.2). This is why humans, when physically exhausted, choose to sit or to lie, rather than to stand. Of course, humans do also take a break from sitting or lying by standing up. But even in a case like this, they do not just stand still on the spot; they move about in order to relieve pressure on their buttocks (after a prolonged period of sitting) or in order to reactivate their muscles (after a prolonged period of lying down). In contrast, sitting or lying can be an activity in itself (e.g. *They are just sitting around* or *They are just lying around*). More importantly, humans in a sitting or lying position continue to be in that bodily posture through time because they are unable to move about freely. (X cannot move from A to B in a sitting or lying position unless X is transported by means of a vehicle.) Thus, sitting or lying, unlike standing, is stationary. This suggests strongly that X is construed to be located more securely or firmly in a sitting or lying position than in a standing position. In other words, the location of X in a sitting or lying position is more akin to the location of an agent in the midst of an ongoing activity than is the location of X in a standing position (see Bybee *et al.* 1994: 133). Thus, it makes sense that the posture verbs 'sit' and 'lie', rather than the posture verb 'stand', have been grammaticalized as progressive-aspect-bearing auxiliary verbs in Korean.⁸ The stationary nature of sitting and lying, as opposed to the potentially non-stationary nature of standing, seems to be what differentiates essentially between the posture verbs 'sit' and 'lie' on the one hand and the posture verb 'stand' on the other, insofar as the expressing of progressive aspect in Korean is concerned.

The second question concerns the difference between the vulgar and plain forms of the posture verb ‘lie’ in terms of the encoding of progressive aspect. Clearly, the difference in speech level has something to do with the use of the vulgar, not plain, form of ‘lie’ for aspect marking. Why that may be so needs explanation, however. As has already been pointed out, the standing posture requires the highest level of control and balance. The amount of pressure imposed on the spine, legs, and feet while standing is much greater than while sitting or lying. Lying requires little or no active use of muscles or control, as the whole body, whether supine or prone, is at rest on a horizontal surface. Sitting must be somewhere in between standing and lying in terms of control and balance. This is captured in the continuum of control in (29), renumbered here as (56).

- (56) ‘stand’ > ‘sit’ > ‘lie’
 >=requires more sensorimotor control than

Incidentally, the ‘position’ of lying relative to standing and sitting on the continuum of control in (56) is reflected indirectly in one common idiomatic expression in Korean, as in (57).

- (57) ku il-un nwuwu-ase ttek mek-ki-ta
 the job-TOP lie.PLAIN-CONJ cake eat-NR-IND
 ‘(literally) The job is like eating cake while lying down.’ or
 ‘The job is a piece of cake.’

The reasoning behind this idiomatic expression — the other posture verbs ‘stand’ and ‘sit’ can never replace the posture verb ‘lie’ in (57) — seems to be that it becomes even easier to do an easy thing (expressed metaphorically by *ttek mek-ki* ‘to eat cake’) in a postural position that does not require control, balance or use of muscles (i.e. lying) than in a postural position that does so (i.e. standing or sitting). The idiomatic expression as a whole then describes how easy the job in question is.

Between the two forms of the posture verb ‘lie’, *nwup-* and *cappaci-*, the plain form expresses a higher degree of control than does the vulgar form. This may be related to the original meaning of the vulgar form *cappaci-*, ‘to fall backwards (and to sprawl out on one’s back)’.⁹ This difference in control is evidenced by the fact that the plain form of ‘lie’ may not co-occur with adverbials such as *silswulo* ‘by mistake’, or ‘accidentally’, whereas the vulgar form of ‘lie’ may, as is illustrated by (58) and (59).

- (58) ?ku salam-un silswulo nwuwu-ess-ta
 the man-TOP accidentally lie.PLAIN-PST-IND
 ?‘The man accidentally lay down.’

- (59) *ku salam-un silswulo cappaci-ess-ta*
 the man-TOP accidentally lie.VULGAR-PST-IND
 'The man accidentally fell backwards.'

One is more able to exercise control in lying down than in falling backwards. For instance, one may be physically able to suspend or terminate the process of lying down (e.g. holding oneself in a position intermediate between sitting and lying down or getting up after half lying down), but one may be unable to suspend or terminate the process of falling backwards. In other words, the continuum in (56) can further be refined to (60).

- (60) 'stand' > 'sit' > 'lie' (plain) > 'lie' (vulgar)
 >=requires more sensorimotor control than

Furthermore, as has briefly been alluded to with respect to (53), there is a strong pragmatic implication linked with the use of the posture verb 'sit' or vulgar 'lie' as a progressive-aspect-bearing auxiliary verb: the speaker believes that the agent has somehow lost control over his or her activity (as in exaggeration, engrossment, preoccupation, and the like). In (53), Speaker A is accusing Speaker B of making a ludicrous comment or suggestion; Speaker A is in effect telling Speaker B that Speaker B is not in control of what Speaker B is saying. This is why the sentences in (53), especially coupled with right prosodic features, are very often exchanged in a fierce argument or confrontation.¹⁰ Needless to say, making such an accusation is a face threatening act, i.e. a blunt attack on the Hearer's (or Speaker B's) positive face (Brown and Levinson 1978, 1987). Indeed, Speaker B reacts immediately to Speaker A's accusation by retorting that Speaker A is incapable of making a correct statement about Speaker B's bodily posture (i.e. a face threatening act in return). The implication of Speaker B's rebuttal is, of course, that Speaker A is incapable of making his or her accusation, because Speaker A cannot correctly ascertain Speaker B's bodily posture (sitting vs standing) — something that even very young children can do. Such a face threatening verbal act, however, normally cannot be carried out in relation to someone who the speaker knows is socio-economically superior to him or her. This can perhaps explain why the vulgar form of 'lie', *cappaci-*, used in relation to the speaker's socio-economic inferiors or equals, has been grammaticalized as a progressive-aspect-bearing auxiliary verb, and, conversely, why the plain form of 'lie', *nwup-*, has never been pressed into service to encode progressive aspect. The vulgar form of 'lie' certainly is much more 'appropriate' for the type of interactional situation in which such face threatening acts are carried out than is the plain form of 'lie'. This kind of 'choice' is, of course, unavailable in the case of the posture verb 'sit', which does not make a formal distinction between plain and vulgar.

5. The correlation between the encoding of spatial position and auxiliatio

Kuteva (1999:205) puts forth the proposal that “the first prerequisite for the posture-verb structure to start along the path of [aspectual] auxiliatio is the use of the posture verbs as unmarked/canonical encodings of the spatial position of physical objects [inanimate as well as human and animate].” Unmarked or canonical encodings “are most frequently encountered in everyday language and are more salient than others” (Kuteva 1999:201). From this, it follows that that there will be no languages which utilize the posture verb ‘stand’, ‘sit’ or ‘lie’ to express progressive aspect without encoding the spatial position of inanimate *as well as* human and animate entities, although there will be languages which may encode the spatial position of inanimate *as well as* human and animate entities without necessarily employing the posture verbs for purposes of aspect marking. To put it differently, there is a unilateral implication between ‘stand’/‘sit’/‘lie’ aspectual auxiliatio and ‘stand’/‘sit’/‘lie’ encoding of spatial positions to the effect that the former implies the latter, but not the other way around. In support of this, Kuteva (1999:200–5) adduces evidence from both European and non-European languages.

The conceptual basis for the implication in question is claimed to be as follows (Kuteva 1999:206–8). The basic function of the posture verb is to “specify the orientation of the human body in space.” This is, in other words, the ‘focal’ feature of the posture verb. Indeed, the original function of the posture verb in the Korean *ko*-conjoined structure is to depict the bodily posture of the agent. The posture verb does also involve a non-focal feature or what Kuteva (1999:206) refers to as “inherent stative semantics, or temporal ‘unboundedness’ of the verb situation.” For instance, the posture verb ‘lie’ necessarily encodes continuation of a lying posture through time. This non-focal feature of “inherent unboundedness of the verb situation” may be elevated to the focal feature of the posture verb. In order for this to happen, however, the loss of the “human body” semantics of ‘stand’, ‘sit’ or ‘lie’ must first occur with the effect that the posture verb can apply not only to human entities but also to animate and inanimate entities (Kuteva 1999:207). To put it differently, “desemanticization” of the posture verbs ‘stand’, ‘sit’, and ‘lie’ is claimed to be the prerequisite for grammaticalization as aspect-bearing auxiliary verbs of these verbs. Moreover, out of this “new” focal feature of the temporal unboundedness does the aspectual meaning in question (e.g. progressive aspect) arise, as has been well documented and discussed in the literature (cf. Heine *et al.* 1991a and b, Heine 1993, Bybee *et al.* 1994 *inter alia*).

The situation in Korean, however, does cast doubt on Kuteva’s scenario, because the posture verb ‘lie’ in particular cannot encode the spatial position of inanimate entities although it has already been pressed into service to express

progressive aspect, albeit with respect to human and animate agents. This posture verb can apply only to the spatial position of humans and animals. This is generally also true of the posture verb 'sit'. Moreover, in Korean the use of the posture verbs 'sit' and 'lie' cannot even be regarded as an unmarked or canonical way of encoding the spatial position of human or animate entities, anyway. Use of the verb of existence *iss-* alone will suffice. On the other hand, the posture verb 'stand', while encoding the spatial position of not only animate but also inanimate entities, can never be utilized to express progressive aspect. Thus, insofar as the posture verb 'stand' is concerned, one can perhaps argue that it may further develop, or it has not yet developed, into a progressive-aspect-bearing auxiliary verb. The evidence from the posture verbs 'lie' and 'sit' in Korean, however, attests strongly to the possibility that posture verbs can develop directly into progressive-aspect-bearing auxiliary verbs without first being extended to encode canonically the spatial position of inanimate entities. This in turn suggests that the posture-based extension and the aspectual extension of the posture verbs 'stand', 'sit', and 'lie' may be conceptually independent of each other, rather than the latter presupposing the former, as is assumed in Kuteva's (1999:207) scenario. In other words, the aspectual extension of the posture verb may not necessarily depend upon the loss of the specific body semantics from the meaning of the posture verb. Perhaps this does not come as a total surprise in view of the fact that, at least in Korean, the conceptual basis of the posture-based extension is height relative to that of humans, whereas the aspectual extension is based on the distinction between stationary and non-stationary, interwoven with the agent's lack of control. These two extensions do indeed have very different conceptual bases.

6. The posture-based extension to professions or institutionalized activities

In what may be regarded as a metonymic process, the posture verbs 'stand', 'sit' and 'lie' can also be utilized to encode what Van Oosten (1986:147) describes as the "usual orientation in the [human] occupation or [institutionalized] activity." In Dutch, for instance, the posture verb *staan* 'to stand', when used in conjunction with certain adverbial expressions, can express people's professions, for instance. Consider:

- (61) Ze staat al tien jaar voor de klas
 she stand already ten years in-front-of the class
 'She has been teaching for ten years.'

The other posture verb *zitten* 'sit' is also used in a similar fashion.

- (62) Hij zit nog op school
 he sits still at school
 'He is still in school (has not yet graduated).'

Note that the sentence in (62) contrasts with the one in (63), in which the person's present whereabouts are indicated.

- (63) Hij is nog op school
 he is still at school
 'He is still at school (has not come home today yet).'

In Korean as well, such metonymic use of the posture verbs 'stand', 'sit', and 'lie' can be witnessed, as in:

- (64) cang kyoswu-nim-un kyotan-ey sip nyen tongan
 Chang professor-HON-TOP podium-LOC ten year for
 se-keysi-ess-ta
 stand-is.HON-PST-IND
 'Professor Chang had lectured for ten years.'

- (65) ku coongsa-nun coongsek-ey sip nyen ina
 the pilot-TOP pilot.seat-LOC ten year as.many.as
 anc-un kyenghem-i iss-ta
 sit-REL experience-NOM is-IND
 'The pilot has ten years of experience in flying (planes).'

- (66) ku phihayca-nun pyengwuen-ey nwuwu-e-iss-ta
 the victim-TOP hospital-LOC lie.PLAIN-F-IS-IND
 'The victim is in hospital [i.e. The victim is hospitalized].'

Needless to say, in (64) the professor could not possibly have continued to stand on the podium for the whole duration of ten years! What the posture verb 'stand' in (64) does highlight, however, is the bodily posture associated typically with lecturing; one normally delivers a lecture in a standing position. In the case of (65), sitting is the bodily posture that the pilot assumes while flying a plane. The same can be said of (66) to the effect that the normal bodily posture of patients in hospital is that of lying (in bed). This is what the posture verb 'lie' brings to the fore in the sentence in (66), as it were. Finally, the vulgar form of the posture verb 'lie', due to its speech-level properties, may be found only in 'negative' contexts. It may thus be metonymically utilized to describe the postural orientation in socially disapproved or stigmatized activities, for instance. This is exemplified in (67), which requires little explanation.

- (67) ku nom-un yupwunye-tul-ilang hotheyl pang-ey
 the bastard-TOP married.woman-PL-COM hotel room-LOC
 cappaci-ase chengchwun-ul ta ponay-ess-ta
 lie.VULGAR-CONJ youth-ACC all spend-PST-IND
 'The bastard spent all his youth lying with married women in hotel
 rooms [e.g. description of a former gigolo].'

7. Conclusion

In Korean, the posture verb 'lie' can be utilized to encode the spatial position of animate entities, but not that of inanimate entities. This is also found to be generally true of the posture verb 'sit'. The posture verb 'stand', on the other hand, applies to some, but not other, animate or inanimate entities. I have argued that vertical orientation relative to the height of humans has a bearing upon the distribution of the posture verb 'stand' in the encoding of the spatial position of animate or inanimate entities. I have also demonstrated that the posture verbs 'sit' and vulgar 'lie', but not 'stand', can be extended to express progressive aspect. The conceptual basis for this aspectual extension is the stationary nature of the bodily posture denoted by the verb 'sit' or vulgar 'lie', as opposed to the potentially non-stationary nature of the bodily posture denoted by the verb 'stand'. Moreover, the disparity in control between the plain and vulgar forms of the posture verb 'lie' has been demonstrated to have contributed to selection of the vulgar, rather than plain, form of the posture verb 'lie' as a progressive-aspect-bearing auxiliary verb. This is also taken to be related to the fact that the aspectual extension of the posture verb vulgar 'lie' (or 'sit' for that matter), more frequently than not, is observed in the context of the speaker's negative comments on other people's lack of control in their activities. I have also called into question Kuteva's (1999) unilateral implication between 'stand'/'sit'/'lie' aspectual auxiliation and 'stand'/'sit'/'lie' encoding of spatial positions, because in Korean the posture verb 'lie' in particular has developed into a progressive-aspect-bearing auxiliary verb although it does not at all encode the spatial position of inanimate entities. Finally, I have also discussed one metonymic use of the posture verbs 'stand', 'sit' and 'lie' in Korean: description of occupations or institutionalized activities.

Abbreviations

ABL=ablative; ACC=accusative; CL=classifier; COM=comitative; CONJ=conjunctive; F=filler; HON=honorific; IND=indicative; INST=instrumental; LOC=locative; NOM=nominative;

NR=nominalizer; PL=plural; PST=past; Q=question; QT=quotative; RDP=reduplication; SG=singular; SUP=suppositive; TOP=topic.

Notes

* I am indebted to Keith Allan, Tania Kuteva, and John Newman for their useful comments on earlier drafts of this chapter. Needless to say, this must not be taken to mean that they agree with everything I say here. For the sake of convenience, the imperfective, static meaning of ‘to be in a standing, sitting or lying position’ will be represented by ‘stand’, ‘sit’ or ‘lie’, respectively.

1. Note that, without the verb of existence *iss-*, the posture verbs in question do not bear the imperfective, stative meanings of ‘to be in a standing position’, ‘to be in a sitting position’ and ‘to be in a lying position’. For instance, the posture verb ‘sit’ alone will only have the perfective, dynamic meaning of ‘to put oneself into a sitting position’.

2. This is not entirely correct, however. It is possible for the posture verb ‘sit’ to encode the spatial position of a very limited number of inanimate objects which can be thought of as having accumulated on a hard surface by descending from a high position. This is illustrated by the following two examples.

- (i) seli-ka hayahkey non-wui-ey anc-e-iss-ta
frost-NOM white paddy.field-top-LOC sit-F-IS-IND
‘Frost has covered the paddy field white.’
- (ii) menci-ka ppoyahkey theyleybi-wui-ey anc-e-iss-ta
dust-NOM white TV-top-LOC sit-F-IS-IND
‘White dust has gathered on top of the TV.’

In (i), moisture in the air (high position) has transformed itself into frost formed on the paddy field (low position). This lowering of the spatial position is also evident in (ii). The descending of such inanimate objects, however, must be slow and gradual, not sudden and abrupt. Otherwise, the spatial position of inanimate objects cannot be described by means of the posture verb ‘sit’, as (iii) demonstrates.

- (iii) *phosutha-ka ta pyek-eyse tteleci-a pang.patak-ey
poster-NOM all wall-ABL fall-CONJ floor-LOC
anc-e-iss-ta
sit-F-IS-IND
‘The posters have all fallen from the wall onto the floor.’

The falling of posters from a wall, unlike the settling of dust, cannot be slow and gradual. Moreover, not all inanimate objects that accumulate gradually on a hard surface by descending slowly from a high position can co-occur with the posture verb ‘sit’, as can be seen from the following example.

- (iv) *nwun-i cangtok-wui-ey anc-e-iss-ta
snow-NOM soy.sauce.crock-top-LOC sit-F-IS-IND
‘Snow has settled on the crocks of soy sauce.’

Both frost and snow do originate from the atmosphere and settle on a hard surface. But it is not clear why the spatial position of frost can be described by means of the posture verb 'sit', whereas that of snow cannot. The foregoing examples demonstrate clearly that the posture verb 'sit' may only be used in conjunction with a very small number of inanimate objects under restricted circumstances. It can be concluded that use of the posture verb 'sit' for the encoding of the spatial position of inanimate objects is an extremely marginal phenomenon in Korean. In the rest of this chapter, then, this heavily restricted use of the posture verb 'sit' will be left out of consideration.

3. Note, incidentally, that in English the posture verb 'stand' may be used in relation to inanimate entities in order to highlight their vertical, as opposed to horizontal, orientation. Compare:

(i) The book is standing on the table.

(ii) The book is lying on the table.

In (i), the vertical orientation on a table of a book is clearly indicated in contrast to the horizontal orientation on a table of a book in (ii). Thus, in English either the posture verb 'stand' or 'lie' may be selected, depending on the spatial orientation of inanimate entities such as books.

4. Thus, it is expected that in Korean the location of the place where horses are kept (i.e. a stable) can be described by means of the posture verb 'stand', whereas the location of the place where dogs are kept (i.e. a kennel) cannot. This is the case, indeed. Compare:

(i) makwukan-i cip-twui-ey se-iss-ta
stable-NOM house-back-LOC stand-is-IND
'The stable is located behind the house.'

(ii) *kaycip-i cip-twui-ey se-iss-ta
kennel-NOM house-back-LOC stand-is-IND
'The kennel is located behind the house.'

5. Something similar to this or, more accurately, perceived distance relative to the height of humans in different bodily postures is reported to have motivated the development of posture verbs into demonstratives in some Australian languages (Evans 1990: 142–4). In Yir-Yoront, for example, the proximal demonstrative (*nh*)an 'this near speaker' is probably derived historically from the posture verb *than* 'stand', whereas the distal demonstrative (*nh*)in 'that distant' is clearly related to the posture verb *nhin* 'sit'. Evans (1990: 142) is of the opinion that the imputed distance (i.e. proximal vs distal) is represented iconically by the posture verb most appropriate to the height of the object at various distances. Objects may appear to be smaller (or farther away) when looked at in a lying position than in a standing position, for instance.

Moreover, height relative to that of humans in Korean contrasts with horizontal orientation evident in the use of the Chinese posture verb *tǎng* 'lie' in the encoding of the spatial position of inanimate entities. Newman (personal communication) points out that, while applying freely to human and animate entities, *tǎng* 'lie' is extended only to horizontally elongated inanimate entities, e.g. fallen trees, logs, and wooden planks (but not toothpicks, books and magazines). Thus, the use of the posture verb *tǎng* 'lie' in Chinese depends on the

horizontal orientation of a given inanimate entity, with complications relating to length (e.g. logs vs toothpicks). It is not clear, however, what that horizontal length is relative to.

6. The posture verb ‘stand’ can sometimes be used also in relation to inanimate entities to emphasize the latter’s ‘defiance’ of age or natural deterioration, notwithstanding the considerable difference in size between them and their locations. For example, consider:

- (i) wuli cip-un acikto ku tosi-ey se-iss-ta
 our house-TOP still the city-LOC stand-is-IND
 ‘Our house still stands in the city.’

The sentence in (i) means that the house still exists in the city, contrary to the expectation that it should by now have been demolished or destroyed because of its age, for instance. The function of the posture verb ‘stand’ in (i) is not so much to encode the spatial position of the house as to highlight the fact that the house has withstood age or natural deterioration (also see Newman, this volume, p. 17). This also explains why it, without the adverb *acikto* ‘still’, will be rendered ungrammatical, as in (ii).

- (ii) *wuli cip-un ku tosi-ey se-iss-ta
 our house-TOP the city-LOC stand-is-IND
 ??‘Our house stands in the city.’

Indeed, the posture verb *se-* in (i) is related closely to the same posture verb used in (iii).

- (iii) ku salam-un yekkyeng-eyto.pwulkwuhako kwutkwuthakey
 the man-TOP adversity-in.spite.of uprightly
 se-ase insayng-ul sal-e-o-ass-ta
 stand-CONJ life-ACC live-F-COME-PST-IND
 ‘In spite of adversities, he lived his life uprightly.’

7. Thus, if (42) and (43) were intended to encode two simultaneous events, they would be semantically anomalous (e.g. *!Why are you sitting while doing nothing but running?*).

8. In some languages, e.g. Diegueño in (39) (also Newman, this volume, p. 16), it is the posture verb ‘stand’ rather than the posture verb ‘sit’ or ‘lie’ that undergoes the aspectual extension. Needless to say, the conceptual basis for the aspectual extension in such languages will be very different from what has been proposed here for Korean. It is outside the purview of this chapter to discover what that conceptual basis may be, although it must be noted that in the majority of instances of aspectual extension from posture verbs the source seems to be the verb ‘sit’, followed by the verb ‘lie’ (John Newman, personal communication).

9. The vulgar form *cappaci-* contains the inchoative suffix *-ci-*, but *cappa-* alone is defective in the sense that it cannot appear without the support of the inchoative suffix. Another example like *cappaci-* is *salaci-* ‘to vanish’; *sala-*, unable to stand by itself, must also co-occur with *-ci-*.

10. In an acrimonious situation, the vulgar form of ‘lie’, *cappaci-*, is more ‘appropriate’ for expressing progressive aspect than the posture verb ‘sit’ *anc-*, as in (i).

- (i) wus-ki-ko cappaci-e-iss-ney
 laugh-cause-CONJ lie.VULGAR-F-is-IND
 ‘You got to be kidding.’ or
 ‘You are insane.’ or ‘You are deranged.’

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CHAPTER 15

Embodied standing and the psychological semantics of *stand*

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1. Introduction

Standing is a basic, even defining, aspect of human embodied experience. Not surprisingly, the word *stand*, and its associates (e.g., *stands*, *standing*, *standings*) is highly frequent in English and has over time come to express a variety of meanings. Consider the word *stand* in the following sentences:

- (1) a. Please stand at attention.
- b. He wouldn't stand for such treatment.
- c. The clock stands on the mantle.
- d. The law still stands.
- e. He stands six-foot five.
- f. The part stands for the whole.
- g. She had a one-night stand with a stranger.

These sentences represent just a few of the many senses of *stand* that are common in everyday speech and writing. Some of these senses refer to the physical act of standing (e.g., *Please stand at attention*, *The clock stands on the mantle*, *He stands six-foot five*), yet others have nonphysical, perhaps figurative, interpretations (e.g., *We stood accused of the crime*, *The part stands for the whole*, *He wouldn't stand for such treatment*). Why is it reasonable to use *stand* when talking of nonphysical events, as in *He wouldn't stand for such treatment*?

My purpose in this chapter is to provide an answer to this question by exploring the links between embodied experiences of standing and the psychological semantics of the polysemous word *stand*. As a cognitive psychologist, I am less interested in providing a complete semantic analysis of the word *stand* than I am in establishing the embodied motivation for the various meanings of *stand*. My claim is that one can make predictions about the varied uses of *stand* from an independent examination of the embodied experience of standing.

2. Embodied STANDING

Our sense of our bodies is central to how we define ourselves as different from other people and objects (Baker 2000). Psychologists often focus on the five senses of sight, hearing, taste, touch, and smell in describing people's sensory experiences. But there is also an important sixth sense of proprioception that provides information about the position, posture, and movement of our bodies in physical space. Proprioceptive information arises from a wide range of different receptors located throughout the body. Proprioception provides information that is non-conceptual, holistic, and unconscious and constitutes the fundamental character of the *body schema* (O'Shaughnessy 1995). Psychologists refer to the *body image*, on the other hand, to refer to the conceptual way we perceive our bodies, including our emotional attitudes toward our knowledge of our bodies (O'Shaughnessy 1995). The body schema is essentially implicated in allowing us to execute gross and fine-motor movements.

Consider the body schema when a person is standing up straight. Since late infancy, we can stand up erect without having to consciously activate appropriate motor programs at our disposal. The body schema provides the fine-tuning for posture, so that if our arms are slightly in front of our body, we have to lean back slightly to compensate for the extra weight in front. If we carry something in front of us, we lean to compensate even more, and this happens without having to think about it in any way. We don't notice these small physical corrections in most cases. Only under special circumstances, such as when someone is pregnant or standing over a narrow beam several feet above the ground do we realize that we must lean backwards. Ordinarily, all we need to stand up straight is the information our proprioception sense provides together with information from the balance organ (i.e., the vestibular system).

There are interesting consequences associated with one's ability to stand. Consider the embodied experience of a young infant. As babies first stand, they experience both success (standing/walking) and failure (stumbling/falling). Once infants begin to stand, they have a means of control over their own behavior, an opportunity to imitate and master the behavior of adults. This is the foundation for the basic metaphorical concepts such as UNSTEADINESS IS NEAR FAILURE (e.g., *He stumbled through his oral exams*, *The government is tottering*) and FALLING IS FAILURE (e.g., *His jokes fell flat*, *The scheme fell through*, *The government has fallen*). To be erect and straight represents viability (e.g., *The law still stands*), and moral qualities of straightforwardness, uprightness, and respectability (e.g., *He was a stand-up guy*). Stooping and bent body positions are associated with debasement and failure to stand erect (e.g., *They hung their heads in shame*, *Her spirits dropped*, *They were weighed down with grief*). To be crooked is to be dishonest (e.g., *That man is a crook*). In general, young children's early

physical, sensorimotor experiences form the basis for more complex thoughts in adulthood and these concepts are reflected in systematic patterns of linguistic expressions.

3. Image schemas

This brief exploration of the relationship between different aspects of standing and people's metaphorical concepts of their experience illustrates how linguistic meaning may be motivated by recurring embodied experiences. One of the important achievements of cognitive linguistic research over the past 15 years is its demonstration of the bodily basis of language and thought (e.g., Lakoff 1987; Lakoff and Johnson 1999; Johnson 1987). Under this perspective, much of our knowledge is not static, propositional, and sentential, but is grounded in and structured by various patterns of our perceptual interactions, bodily actions, and manipulations of objects. These patterns are experiential *gestalts*, called *image schemas*, that emerge throughout sensorimotor activity as we manipulate objects, orient ourselves spatially and temporally, and direct our perceptual focus for various purposes. Image-schemas can generally be defined as dynamic analog representations of spatial relations and movements in space.

Consider two image schemas that may be intimately related to standing and to our understanding of the meanings of *stand*. First, the idea of balance is something that is learned with our bodies and not by grasping a set of rules (Johnson 1987:74). Balancing is such a pervasive part of our bodily experience that we are seldom aware of its presence in everyday life. We come to know the meaning of balance through the closely related experiences of bodily equilibrium or loss of equilibrium. For example, a baby stands, wobbles, and drops to the floor. It tries again and again, as it learns how to maintain a balanced erect posture. A young boy struggles to stay up on a two-wheeled bicycle as he learns to keep his balance while riding down the street. Each of us has experienced occasions when we have too much acid in our stomachs, when our hands get cold, our heads feel too hot, our bladders feel distended, our sinuses become swollen, and our mouths feel dry. In these and numerous other ways we learn the meanings of lack of balance or equilibrium. We respond to imbalance and disequilibrium by warming our hands, giving moisture to our mouths, draining our bladders, and so forth until we feel balanced once again. Our *BALANCE* image schema emerges, then, through our experiences of maintaining our bodily systems and functions in states of equilibrium. We refer to these recurring bodily experiences as *image schemas* to emphasize means of structuring particular experiences schematically so that we can give order and connectedness to our perceptions and conceptions (Johnson 1987).

A single image schema can be instantiated in many different domains because the internal structure of a single schema can be metaphorically understood. Our BALANCE image schema is metaphorically elaborated in a large number of abstract domains of experience. For instance, our experience of bodily balance and the perception of balance is connected to our understanding of balanced personalities, balanced views, balanced systems, balanced equilibrium, the balance of power, the balance of justice, and so on. In each of these examples, the mental or the abstract concept of balance is understood and experienced in terms of our physical understanding of balance.

Another image schema that may be related to standing is VERTICALITY. We experience verticality whenever we stand completely straight with our feet planted firmly on the ground. Verticality is understood whenever we see objects on the ground that are perpendicular to the ground, such as trees, poles, chimneys, etc. Objects that are vertical are especially salient in the visual field. However, objects that are vertical are widely associated with things that endure, or even have life, including plants, animals, and people, each of which is more horizontal than vertical when dead. The VERTICALITY image schema arises as a recurring pattern across these different embodied experiences.

The BALANCE and VERTICALITY image schemas are just two of the over two dozen different image schemas that cognitive linguists claim appear regularly in people's everyday thinking, reasoning, and imagination (Cienki 1998; Gibbs and Colston 1995; Johnson 1987; Lakoff 1987). Cognitive linguistic studies on image schemas and how they relate to abstract, metaphorically-structured concepts, are primarily based on systematic analyses of individual linguistic expressions, such as those shown with the different conventional expressions (e.g., for BALANCE consider *The equation was balanced*, *His personality was out of balance*). This method of analyzing systematic patterns of linguistic expressions, although providing important empirical evidence, suffers from the problem of lack of falsifiability as to the significance of image schemas in motivating people's use and understanding of language. Cognitive psychologists are sometimes skeptical of theoretical notions from linguistics and philosophy that are primarily based on an individual analyst's intuitions about linguistic structure and behavior (see Gibbs and Matlock 1999; Sandra and Rice 1995 for discussion of this issue from psychological and linguistic perspectives). Psychologists conduct experiments with large groups of people who are naive to the hypothesis in question to minimize the uncertainty in making inferences about thought and behavior in whole populations of people. Moreover, psychologists also argue that nonlinguistic evidence is needed to support the claims about conceptual representations in cognitive linguistic work, especially if there is to be a solution to the circularity problem in which linguistic analyses are used to infer conceptual structures whose existence is then verified by appeal to linguistic expressions (Gibbs and Matlock 1999).

4. Psycholinguistic studies on polysemy

What role do image schemas play in people's understanding of word meaning? Despite the large body of work in cognitive linguistics, few psychological studies have explored the relation between image schemas and polysemy. The vast majority of psycholinguistic studies on polysemy tend to assume the different meanings of a polysemous word are unrelated (see Simpson 1994 for a review). Moreover, they often target only two meanings of a polysemous word and incorrectly equate polysemy with ambiguity. Finally, psycholinguistic studies rarely note any relationship between polysemy and thought, and between language and embodiment, in that the senses of polysemous words might be organized in a similar manner as are ordinary conceptual categories (i.e., in terms of family resemblances or radial categories) (e.g., Brugman and Lakoff 1988; Cuyckens 1995; Lakoff 1987).

Although many on-line psycholinguistic studies allow researchers to examine the time-course of activation for different senses of words with multiple meanings, these studies rarely provide insights into the explicit contents of people's conceptual understandings of word meanings, nor do they tell us much about why people believe words have the meanings they do. There is psycholinguistic research showing that people are, under some conditions, aware that meanings of polysemous words are related to one another (Caramazza and Grober 1976; Colombo and Flores d'Arcais 1984; Durkin and Manning 1989). But no studies have examined why people believe some senses of a word, like *stand*, are more related than are others.

5. The psychological semantics of *stand*

To remedy this situation, Gibbs, Beitel, Harrington, and Sanders (1994) attempted to experimentally show that the different senses of the polysemous word *stand* are motivated by different image schemas that arise from our bodily experience of standing. Their general aim was to empirically demonstrate that the meanings of the polysemous word *stand* are not arbitrary for native speakers, but are motivated by people's recurring bodily experiences in the real world.

Our work explicitly looked for motivated relations between embodiment, thought, and language by independently assessing what people experience and know and then using this information to make specific predictions about people's intuitions about linguistic meaning. Adopting this research strategy enabled us to specifically set up experimental situations so that we can in principle falsify cognitive linguistic hypotheses about language and embodiment relationships. Making specific experimental predictions, which can be potentially falsified, about

people's linguistic behavior is essential if cognitive scientists, most generally, are to accept the psychological reality of theoretical accounts of polysemy. We recognize the need to independently evaluate non-linguistic information before any linkages with linguistic examples can be empirically examined. In our view, nonetheless, the cognitive linguistic work is primary in that it suggests exactly what conceptual and embodied schemes might indeed be worth looking at. The point here is that our studies illustrate one way of making explicit predictions about linguistic behavior from non-linguistic information.

The first step toward understanding how image schemas partly motivate the meanings of the polysemous word *stand* was to determine which image schemas best reflect people's recurring bodily experiences of standing. In the first study, a group of college students were brought into the lab, asked to stand up, and were guided through a brief set of bodily exercises to get them to consciously think about their own physical experience of standing. For instance, participants were asked to stand up, to move around, bend over, to crouch, and to stretch out on their tip-toes. Having people actually engage in these bodily experiences facilitates participants' intuitive understandings of how their experience of standing related to many different possible image schemas. After this brief standing exercise, participants then read brief descriptions of 12 different image schemas that might possibly have some relationship to the experience of physical standing. A listing of these 12 schemas and the descriptions is presented in (2).

- (2) a. Consider the notion of LINKAGE. Linkage refers to the perception of a connection between objects or events. As you stand there, do you feel a sense of linkage?
- b. Consider the notion of VERTICALITY. Verticality refers to the sense of an extension along an up-down orientation. As you stand there, do you feel a sense of verticality?
- c. Consider the notion of BLOCKAGE. Blockage refers to the experience of some obstacle that prevents further physical or mental actions. As you stand there, do you feel a sense of blockage?
- d. Consider the notion of RESISTANCE. Resistance refers to the experience of your body opposing some external force. As you stand there, do you feel a sense of resistance?
- e. Consider the notion of ENABLEMENT. Enablement refers to your sense of some internal force or power that allows you to perform various actions. As you stand there, do you feel a sense of enablement?
- f. Consider the notion of ATTRACTION. Attraction refers to the experience of being pulled toward some objects or events. As you stand there, do you feel a sense of attraction?
- g. Consider the notion of CENTER-PERIPHERY. Center-periphery refers to the

- experience of some objects or events as central while surrounding objects and events are peripheral or to the outside. As you stand there, do you feel a sense of center-periphery?
- h. Consider the notion of CONTAINER. Container refers to the experience of boundedness and enclosure. As you stand there, do you feel a sense of container?
 - i. Consider the notion of PATH. Path refers to the experience of moving. A path has a beginning, a course along which one proceeds, and an end. As you stand there, do you feel a sense of path?
 - j. Consider the notion of FULL-EMPTY. Full-empty refers to the experience of some physical or mental thing being filled or emptied. As you stand there, do you feel a sense of full-empty?
 - k. Consider the notion of CYCLE. Cycle refers to the experience of a particular process. Cycle begins, proceeds through a sequence of events, and ends where it started. As you stand there, do you feel a sense of cycle?
 - l. Consider the notion of BALANCE. Balance refers to your sense of symmetry or stability relative to some point within your body. As you stand there, do you feel a sense of balance?

Afterwards, the participants rated on a 7-point scale the degree of relatedness of each image schema to their own embodied experience of standing. The results of this study showed participants viewed the 12 image schemas differently, with some schemas being rated as highly related to their physical experience of standing, such as VERTICALITY, BALANCE, and RESISTANCE, while other schemas were rated significantly less relevant, such as CYCLE and PATH. The five most salient image schemas associated with physical standing were BALANCE, VERTICALITY, CENTER-PERIPHERY, RESISTANCE, and LINKAGE.

The second experiment in this series examined the relationship between the five most prominent image schemas for the physical experience of standing and the various senses of *stand*. Once again, participants were first asked to stand up and focus on different aspects of their bodily experience of standing. As they did this, the participants were presented with verbal descriptions of the five image schemas BALANCE, VERTICALITY, CENTER-PERIPHERY, RESISTANCE, and LINKAGE. Afterwards, the participants were given a list of 32 senses of *stand* and asked to rate the degree of relatedness between each sense and the five image schemas.

The rating data from this study allowed Gibbs *et al.* (1994) to construct an image schema profile for each of the 32 uses of *stand*. Table 1 presents a list of the different phrases with *stand* along with the image-schematic profile for each use. The profiles are presented in descending order of importance (this table also presents the profiles for the control phrases used in the fourth study — see below). Our expectation was that the image schema profiles would differ consider-

ably across the 32 senses of *stand*. For instance, some instances of *stand* such as *stand on shaky ground* should be viewed as more directly related to the image schemas of BALANCE and VERTICALITY, while other instances, such as *He stands committed*, should be viewed as more related to the image schemas of CENTER-PERIPHERY and RESISTANCE.

Several interesting similarities emerged in the image schema profiles for some of the 32 senses of *stand*. For example, *It stands to reason* and *As the matter now stands* both have the same image schema profile (in their rank-order of importance) of LINKAGE-BALANCE-CENTER/PERIPHERY-RESISTANCE-VERTICALITY. The expressions *Don't stand for such treatment* and *to stand against great odds* are both characterized by the image schema profile RESISTANCE-CENTER/PERIPHERY-LINKAGE-BALANCE-VERTICALITY. Other expressions are quite different in their image-schematic profiles.

The critical third experiment investigated people's judgments of similarity for different senses of *stand*. The participants sorted 35 different senses of *stand* into five groups based on their similarity of meaning (and participants could place as many items in each group as they thought best). Our main hypothesis was that the participants would group together instances of *stand* that shared similar image schema profiles (obtained in the second study).

The data first showed that participants did not sort physical senses of *stand* separately from the nonphysical or figurative senses. For example, the physical idea of standing in *to stand at attention* was often grouped with the metaphorical senses of *stand* in *let the issue stand* and *to stand the test of time*. A more likely explanation is that different uses of *stand* are related to one another through a set of complex semantic links that are partly motivated by various image schemas.

In fact, statistical analyses (discriminant analysis) allowed us to distinguish between groups of *stand* with a classification rule that is based on image schematic structure. We attempted, therefore, to explain participants' sortings of *stand* at a rate better than expected by chance alone (50%). The results showed that knowing the image schema profiles for different senses of *stand* allowed us to predict 79% of all the groupings of *stand*. A second goal of this study was to study the relative importance of individual image schemas to the groupings of senses of *stand*. This analysis showed that BALANCE and LINKAGE were seen as the most important image schemas for predicting participants' groupings of different senses of *stand*. These data provide very strong support for the hypothesis that people's understandings of the meanings of *stand* are partly motivated by image schemas that arise from their bodily experiences of standing.

Finally, a fourth study showed that participants' sortings of *stand* in different groups can't be explained simply in terms of their understanding of the contexts in which these words appeared. We again asked a group of people to participate in an embodied exercise in which they became familiar with the five image schemas

of BALANCE, VERTICALITY, CENTER-PERIPHERY, RESISTANCE, and LINKAGE. The participants then rated the relevance of these five schemas to phrases in which the word *stand* has been replaced by some reasonable equivalent (see Table 1). The image-schematic profiles for these control phrases is shown in Table 1. We then used these profiles to try and predict the groupings participants provided for similar uses of *stand* in the third experiment. We found that these new image-schematic profiles provide a significantly worse fit of the grouping data than did the profiles for phrases with *stand*. Thus, people did not sort phrases, such as *don't stand for such treatment* and *to stand against great odds*, because these phrases refer to the same types of situations. Instead, it appears that people's similarity judgments are best attributed to their tacit understanding of how different patterns of image schemas motivate different uses of the polysemous word *stand*. These image schemas not only produce the grounding for many physical senses of *stand* (e.g., *he stands six-foot nine*, *stand in the way*, and *stand at attention*), but also underlie people's understanding of complex, metaphorical uses (e.g., *the part stands for the whole*, *as the matter now stands*, and *the engine can't stand the constant wear*).

Table 1. Image-schematic profiles for phrases containing *stand* and their replacements

<i>stand at attention</i>	<i>be at attention</i>
V-B-R-CP-L	V-B-L-R-CP
<i>stand out in several sports</i>	<i>be distinguished in several sports</i>
CP-V-L-B-R	L-B-CP-V-R
<i>to stand firm</i>	<i>to hold firm</i>
R-B-V-CP-L	R-B-L-V-CP
<i>don't stand for such treatment</i>	<i>don't allow such treatment</i>
R-CP-L-B-V	R-L-CP-B-V
<i>to stand the test of time</i>	<i>to pass the test of time</i>
R-L-B-CP-B-V	R-L-CP-B-V
<i>united we stand</i>	<i>united we are strong</i>
L-R-CP-B-V	L-B-R-CP-V
<i>we stand on 30 years of experience</i>	<i>we are backed up by 30 years experience</i>
L-CP-B-V-R	L-CP-B-V-R
<i>let the issue stand</i>	<i>let the issue remain as is</i>
CP-L-R-B-V	R-B-L-V-CP
<i>let the mixture stand</i>	<i>leave the mixture undisturbed</i>
B-V-L-CP-R	B-R-CP-V-L
<i>get stood up for a date</i>	<i>have a date with someone who didn't show up</i>
V-B-CP-L-R	L-R-CP-V-B
<i>he stands six-foot nine</i>	<i>he measures six-foot nine</i>
V-B-R-L-CP	V-B-L-CP-R

the clock stands on the mantle

B-V-L-CP-R

one-night stand

L-CP-R-V-B

to stand to profit

L-R-B-V-CP

to stand in someone else's shoes

L-CP-V-B-R

on the witness stand

CP-L-V-R-B

stand in awe

V-CP-L-R-B

the police told them to stand back

R-CP-V-L-B

stand by your man

L-V-CP-R-B

the engine can't stand the constant wear

R-L-B-CP-V

stand on shaky ground

B-R-V-L-CP

to stand accused

CP-L-R-V-B

the house stands in the clearing

V-CP-B-L-R

the barometer stands at 30 inches

V-B-L-R-CP

as the matter now stands

L-B-CP-R-V

the part stands for the whole

L-CP-R-B-V

it stands to reason

L-B-CP-R-V

they did nothing but stand around

V-B-L-CP-R

to stand against great odds

R-CP-L-B-V

a standing ovation

V-CP-L-B-R

the boss always stands over me

V-CP-L-R-B

the clock is on the mantle

B-V-L-CP-R

one-night fling

L-CP-R-B-V

to be in the position to make a profit

CP-L-B-V-R

to be in someone else's shoes

L-CP-V-R-B

on the witness platform

CP-L-R-B-V

be in awe

L-CP-B-V-R

the police told them to get back

R-L-CP-B-V

support your man

L-CP-V-B-R

the engine can't endure the constant wear

R-L-CP-B-V

to be on shaky ground

B-R-L-V-CP

to be accused

R-CP-L-B-V

the house is in the clearing

CP-L-V-B-R

the barometer is at 30 inches

V-L-CP-B-R

as the matter now exists

L-CP-B-V-R

the part represents the whole

L-CP-B-V-R

it conforms with reason

L-CP-B-R-V

they did nothing but hang around

CP-L-V-R-B

to face great odds

R-L-CP-B-V

a roaring ovation

L-CP-V-B-R

the boss always hovers over me

CP-R-L-V-B

he stands committed

R–V–B–L–CP

he remains committed

CP–L–V–B–R

Note: R=RESISTANCE; V=VERTICALITY; B=BALANCE; CP=CENTER-PERIPHERY; L=LINKAGE

6. Conclusion

The findings from Gibbs *et al.* (1994) clearly show that independently assessing people's embodied experiences of standing provides predictive power in understanding people's intuitions about the varied meanings of *stand*. People do not judge the similarity of meaning between two senses of a polysemous word only on the basis of image schemas. Many aspects of word meaning that have little to do directly with image schemas certainly play some role in people's understanding of word meaning and their judgments of similarity of meaning for different senses of a polysemous word.

Examining the interaction of embodied experience and linguistic meaning demands that scholars distinguish between, at least, four different hypotheses, shown in (3).

- (3) a. Embodied experience might play some role in changing the meanings of words and expressions over time, but does not motivate contemporary speakers' use and understanding of language.
- b. Embodied experience might motivate the linguistic meanings that have currency within linguistic communities, or may have some role in an *idealized* speakers/hearers' understanding of language. But embodiment does not actually play any part in individual speaker's ability to make sense of or process language.
- c. Embodied experience might motivate individual speaker's use and understanding of why various words and expressions mean what they do, but does not play any role in people's ordinary on-line production or comprehension of everyday language.
- d. Embodied experience might function automatically and interactively in people's on-line use and understanding of linguistic meaning.

These hypotheses are not mutually exclusive of one another but reflect a hierarchy of possibilities about the interaction between embodied patterns of thought and different aspects of language use and understanding. Several kinds of empirical evidence from cognitive linguistics and psycholinguistics support some of these ideas. Linguistic studies on image schemas support hypothesis (3a) (Sweetser 1990), while other research on the systematicity of different linguistic expressions demonstrates a tight link between image schemas and idealized speakers' under-

standing of various verbal expressions as suggested by hypotheses (3b) and (3c) (Cienki 1998; Johnson 1987).

At present, it is unclear how to test hypothesis (3d) in relation to people's understanding of the polysemous word *stand*. These experimental findings do not imply that people automatically access some specific pattern of image schemas each time they encounter a particular use of a word like *stand*. But people tacitly recognize some connection between these schematic bodily experiences and different aspects of linguistic meaning, including meanings that are highly abstract and/or metaphorical. But some psychological evidence is very suggestive that some aspects of hypothesis (3d) may be true. This work demonstrates that embodiment influences symbolic or semantic judgments. In these studies, participants were first asked to make hand shapes corresponding to verbal descriptions such as "pinch" and "clench" (Klatsky, Pelligrino, McCloskey, and Doherty 1989). Following this, the participants made speeded judgments on the sensibility of phrases such as *aim a dart* (sensible) or *close a nail* (not sensible). In general, embodied action relevant to the phrases facilitated people's speeded verifications of these phrases. For instance, the hand shape for "pinch" speeded the sensibility judgments for *aim a dart*. Interestingly, when participants were asked to make verbal responses (but not hand shapes) to the nonverbal prime (e.g., say, the word *pinch* when shown the nonverbal signal for "pinch"), the priming effect was eliminated. It appears that the sensibility judgments require a type of mental simulation using an embodied, motoric medium. One may possibly adopt the Klatsky *et al.*'s methodology in some way to assess the role of image schemas in people's immediate understanding of *stand* in different contexts.

What do the empirical findings on *stand* imply for theories on the mental representation of polysemous words? Both cognitive psychologists and linguists often mistakenly assume that the empirical evidence obtained from psychological experiments transparently reflects the nature of linguistic and conceptual representations. These findings are typically interpreted as evidence against a simple monosemy model, and as being consistent with a derivational or polysemy view for how words with multiple meanings are mentally represented. Moreover, the degree of distinctiveness between the different senses of a polysemous word is viewed as reflecting the distance between senses as these are represented in a lexical network in speakers' minds.

Yet these empirical findings can be interpreted differently. For instance, it is possible that the sorting data in Gibbs *et al.* (1994) may reflect the way participants actually judge the extent to which an abstract word meaning (i.e., the monosemy view) varies in different contexts rather than accessing different aspects (i.e., the nodes) of a lexical network (i.e., the polysemy view). People may simply detect similarity among different senses of a polysemous word "on the fly" as they construct contextually appropriate meanings for these words, which in turn keeps

several meanings active for a short time during sentence processing. Under this alternative view, the relationships between different senses of a polysemous word are established in the immediate moment of understanding and not simply “read-off” from some pre-existing lexical representation.

In summary, the psychological semantics for the word *stand* are significantly motivated by people’s embodied experiences of standing. Our embodied knowledge of standing constrains why people believe different senses of the word *stand*, including nonphysical, abstract uses, seem reasonable in various contexts. As such, my work on *stand* provides additional evidence in support of the embodied view of language and thought in which abstract linguistic symbols are fundamentally grounded in embodied action.

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